FUFE
c

Plate xiii wanting

Bath
Public Reference
Library.

Presented by—
Dr: F Lace

796-42

VIEWS
OF THE

J E Dean – Glasgow 1810

BONES, MUSCLES, VISCERA,
AND
ORGANS OF THE SENSES:

COPIED FROM
THE MOST CELEBRATED AUTHORS,
TOGETHER WITH
SEVERAL ADDITIONS FROM NATURE.

THE WHOLE CONSISTING OF
TWENTY-THREE FOLIO TABLES,
WITH
CONCISE EXPLANATIONS.

By ANDREW FYFE.

Edinburgh:
PRINTED BY J. PILLANS & SONS,
FOR A. GUTHRIE, EDINBURGH, AND T. KAY, LONDON.
1800.

30865

WELLCOME
HISTORICAL
MEDICAL
LIBRARY

TO THE

GENTLEMEN

Attending the MEDICAL CLASSES of the UNIVERSITY of EDINBURGH,

THE FOLLOWING

TABLES,

Which may alſo be found included in a ſeparate and
more extenſive WORK, publiſhed at the
ſame time with this,

Are Dedicated, with the higheſt reſpect, by

Their moſt obedient,

And very humble Servant,

COLLEGE,
JANUARY 1. 1800.

ANDREW FYFE.

TAB. I.

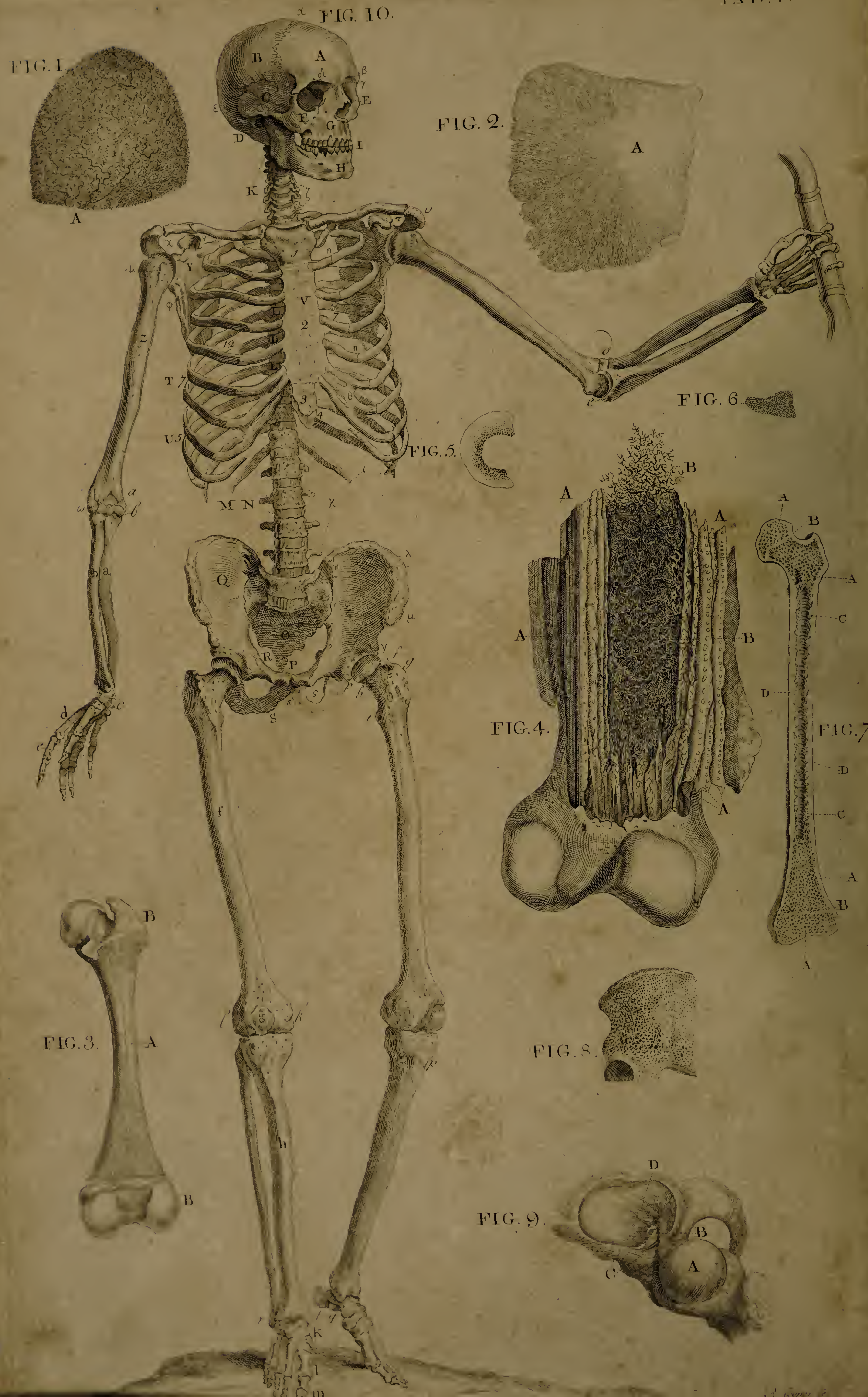


FIG. 1.
A
FIG. 2.
A
FIG. 3.
A
B
B
FIG. 4.
A
A
A
A
B
B
FIG. 5.
FIG. 6.
FIG. 7.
A
B
A
C
D
D
C
A
B
A
FIG. 8.
FIG. 9.
A
B
C
D
FIG. 10.
α
A
B
C
D
E
F
G
H
I
K
L
M
N
O
P
Q
R
S
T
U
V
Y
β
γ
δ
ε
ζ
η
λ
μ
ν
φ
χ
ψ
ω
a
b
c
d
e
f
g
h
i
k
l
m
n
p
q
2
3
4
5
6
7
12

TABLE I.

Represents the General Structure of the Bones, and a Front View of the Male Skeleton.

FIG. 1. From Albinus.

Part of the Os Frontis covered with its Perioſteum, the Arteries of which are injected.—A, The branches which come from the orbit, the other ſmall trunks of the arteries obſerved in ſeveral places, are ſent from the common integuments to the perioſteum.

FIG. 2. From Albinus.

The Parietal Bone of a Fœtus, to ſhew the Radiated Fibres of a Flat Bone, proceeding from the Firſt Oſſified Point A.

FIG. 3. From Nesbet.

The Thigh-Bone of a Fœtus, to ſhew the Longitudinal Parallel Fibres of a Cylindrical Bone.—A, The part which firſt oſſifies.—B, B, The two extremities in a cartilaginous ſtate.

FIG. 4. From Gagliardi.

Section of Part of the Os Femoris, to ſhew the Plates and Cancelli of long Bones in general.—A, A, A, A, The plates of the thigh-bone ſeparated.—B, B, The cancelli.

FIG. 5.

Tranſverſe Section of a Bone burnt, to ſhew the Cavities for containing the Marrow and Veſſels.

FIG. 6. From Havers.

The appearance of the Marrow, viewed with a Microſcope.

FIG. 7. From Cheselden.

The Thigh-Bone ſawed longitudinally through the middle. A, A, A, A, The cancelli.—B, B, The union of the bone with its extremities, which are here in a ſtate of epiphyſis.—C, C, The reticular ſubſtance.—D, D, The ſides, or tables, which are thick and ſtrong in the middle of the bone, and thinner towards the extremities.

FIG. 8. From Cheselden, but conſiderably diminiſhed.

The Os Ilium ſawed through the middle to ſhew the cancelli.

FIG. 9. From Ruysch.

The Hip-Joint of a Child Opened, to ſhew A, The head of the thigh-bone,—B, The round ligament connecting it to the acetabulum,—C, The capſular ligament of the joint, with its arteries injected, and—D, The numerous veſſels of the fatty glandular-like ſubſtance of the joint, alſo injected.

FIG. 10. From Cheselden.

A Front-View of the Male Skeleton.

A, The frontal bone ;—δ, Its ſuperciliary hole.—β, External orbitar proceſs.—γ, Internal orbitar proceſs.—B, The parietal bone. Between A, and B, the coronal ſuture.—C, The temporal bone.—D, ε, The occipital bone.—E, The bones of the noſe.—F, The os malæ.—G, The ſuperior maxillary bone.—H, The lower jaw.—I, The teeth.—K, The ſeven cervical vertebræ, with their intermediate cartilages.—ζ, Their tranſverſe proceſſes.—L, L, &c. The twelve dorſal vertebræ.—M, The five lumbar vertebræ.—N, Their intermediate cartilages.—κ, Their tranſverſe proceſſes.—O, The os ſacrum.—P, The os coccygis.—Q, The os ilium ;—λ, Its ſpine; μ, Its anterior ſuperior ſpinous proceſs ;—ν, Its inferior anterior ſpinous proceſs.—ξ, Venter of the ilium.—ο, Brim of the pelvis.—R, The os pubis.—S, The os iſchium.—π, The crura of the oſſa iſchia.—ς, Foramen thyroideum.—ρ, The acetabulum.—T, The ſeven true ribs.—U, The five falſe ribs.—η, η, Joining of the ribs with their cartilages.—θ, The cartilages of the 6th, 7th, and 8th ribs united with each other.—ι, Cartilaginous points of the 10th, 11th, and 12th ribs.—V, The ſternum ;—1. Its upper piece ;—2. Its middle piece ;—3. 4. Its cartilago enſiformis.—X, The clavicle.—Y, Concave ſurface of the ſcapula of the right ſide.—φ, The ſuperior coſta of the ſcapula, with its ſemilunar notch.—τ, The coracoid proceſs of the left ſide.—υ, The acromion of the left ſide.—Φ, The anterior inferior coſta of the ſcapula of the right ſide.—χ, Head of the os humeri under the acromion.—ψ, Groove for the tendon of the biceps.—Z, The body of the os humeri.—*a*, The trochlea.—ω, The external,—*b*, The internal condyle of the os humeri.—*d*, Head of the radius of the left ſide.—*e*, Olecranon of the ulna of the ſame ſide.—a, The ulna of the right ſide.—b, The radius.—c, The carpus.—d, The metacarpus.—e, The phalanges of the fingers.—f, The right os femoris.—*k*, The internal,—*l*, The external condyle.—g, The patella.—h, The tibia.—i, The fibula.—k, The tarſus. l, The metatarſus.—m, The phalanges of the toes.—r, The malleolus externus.—t, Malleolus internus.—*f*, Ball of the left thigh-bone.—*g*, The great trochanter.—*h*, The cervix.—*i*, The ſmall trochanter.—*p*, Tubercle of the tibia.—*q*, The os calcis.

TAB. II.

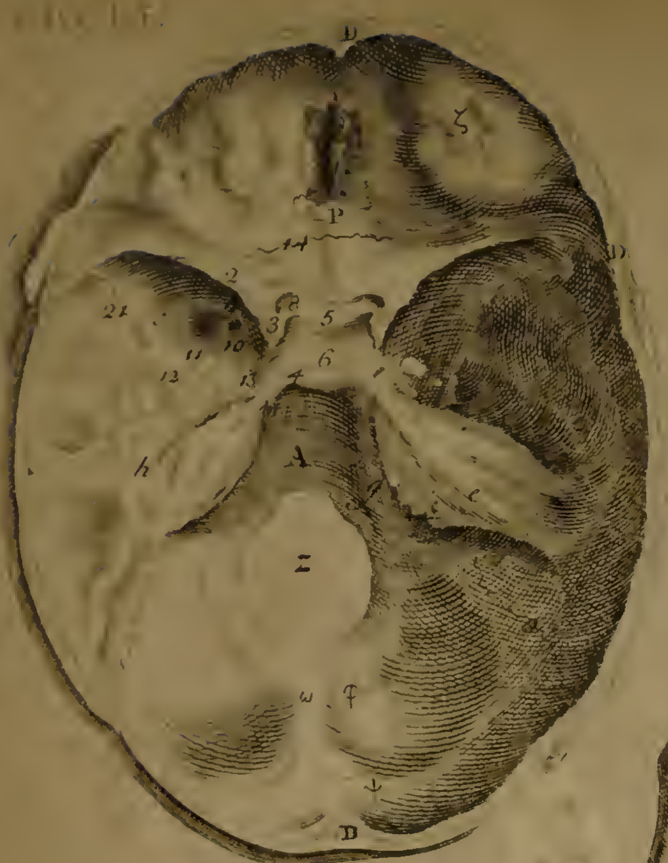


FIG. 15.

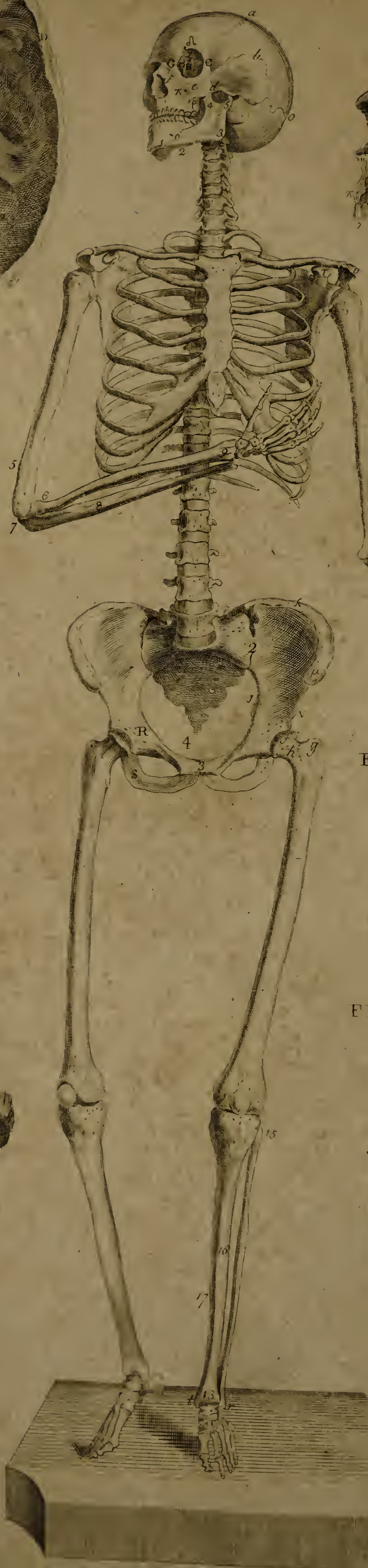
FIG. 1.


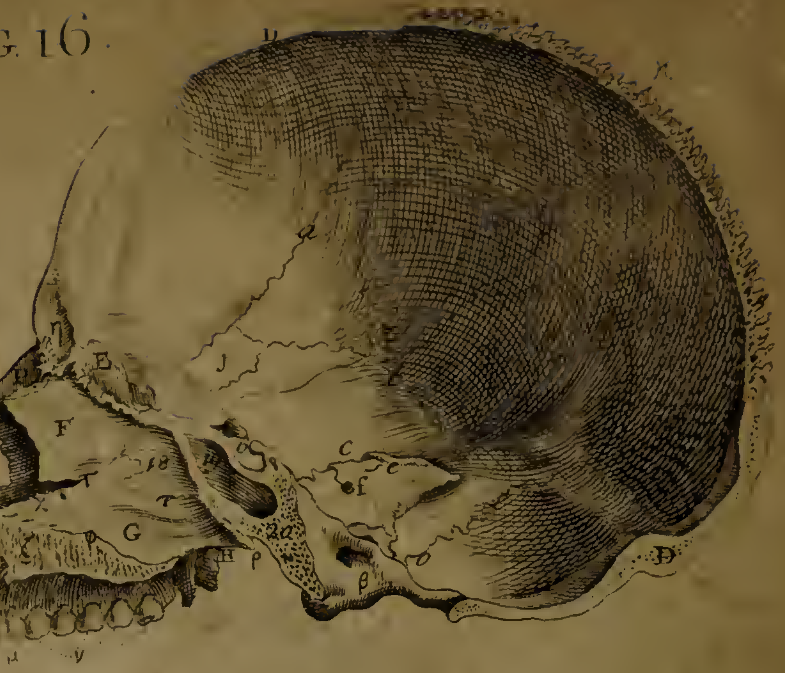
FIG. 16.


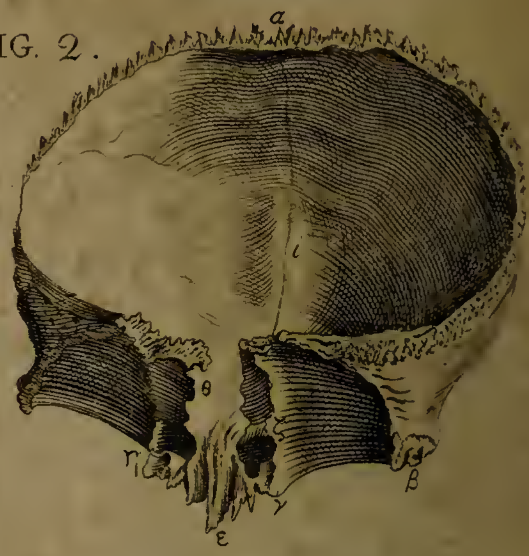
FIG. 2.


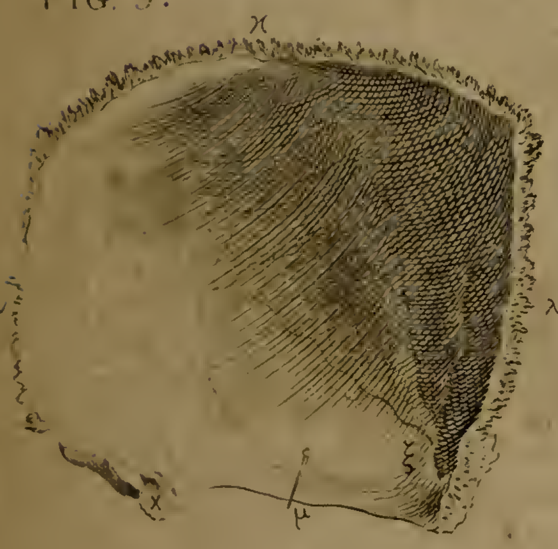
FIG. 3.


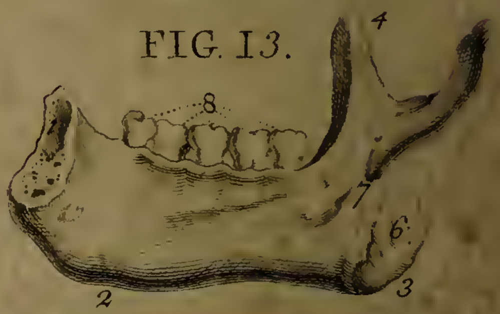
FIG. 13.


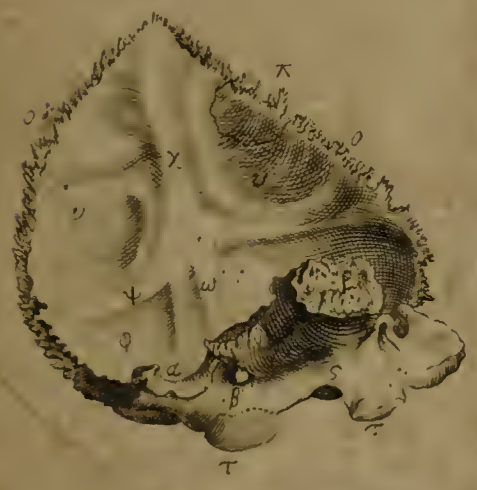
FIG. 4.


FIG. 9.

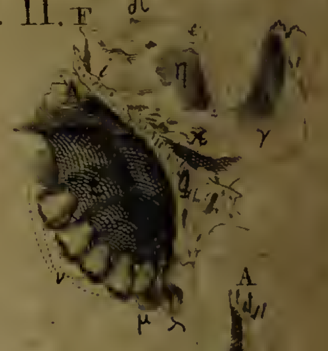
FIG. 11.


FIG. 12.

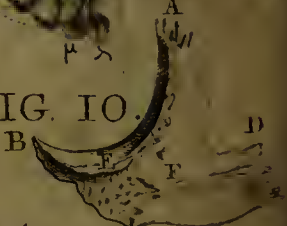
FIG. 10.


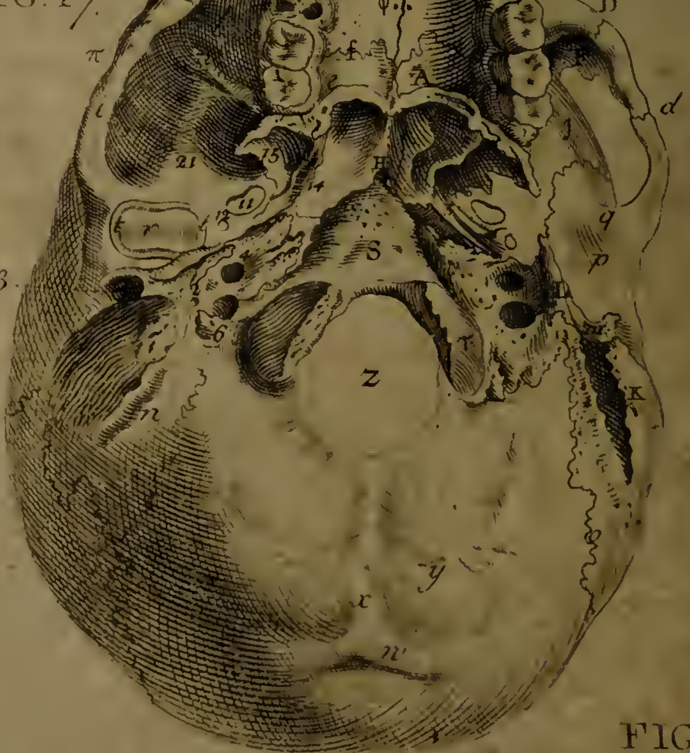
FIG. 17.


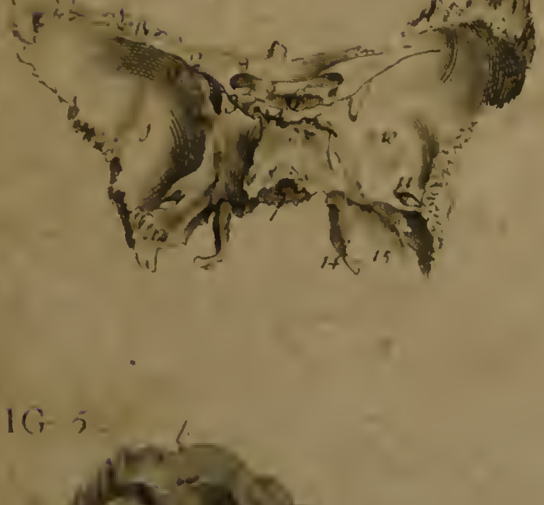
FIG. 6.


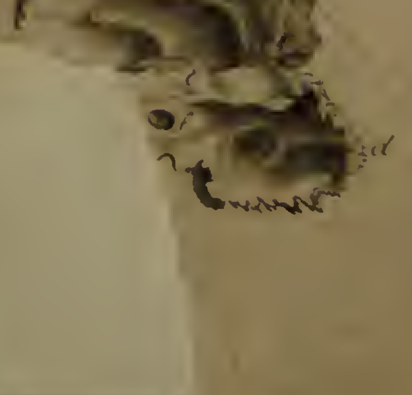
FIG. 5.


FIG. 14.

FIG. 7.

FIG. 8.

TABLE II.

Represents a Front-View of the Female Skeleton, with the Bones of the Head;—all the Figures, excepting one, taken from Cheselden.

FIG. 1.

By comparing this Figure with Fig. 10. of Tab. I. the different Proportions of the Bones of the two Sexes, are ſeen, and the Letters to the ſeveral Bones of the Male Skeleton, explained in Fig. 10. Tab. I. may guide the Eye to the like Bones of the Female Skeleton here repreſented.

The letters added here to the Bones of the Head, are,—*a*, The coronal ſuture.—*b*, The ſquamous ſuture.—*o*, The lambdoid ſuture.—*c*, *c*, The tranſverſe ſuture.—*d*, The Zygomatic ſuture.—*e*, The external orbitar ſuture.—*f*, The lateral naſal ſuture.—δ, The ſuperciliary hole of the frontal bone.—ζ, The orbitar proceſs of the frontal bone.—H, The os planum of the ethmoid bone.—*r*, The lacrymal groove of the os unguis.—π, The external orbitar hole of the maxillary bone.—ρ, The tuber of the maxillary bone.—1. The chin.—2. The baſe of the lower jaw.—3. Its angle.—4. Its coronoid proceſs.—5. Its condyle.—6. The mental hole.

Superior Extremities.—5. The right os humeri.—6. Head of the radius.—7. Olecranon.—8. Ulna.—9. Under end of the radius, marked by muſcles.—τ, The coracoid proceſs of the ſcapula of the left ſide.—υ, The acromion of the ſcapula.—φ, The ſemilunar nitch on the upper edge of the ſcapula.—10. Coronoid proceſs of the ulna.—11. Tubercle of the radius.—12. Under end of the radius;—13. Its ſtyloid proceſs.—14. Styloid proceſs of the ulna. Inferior Extremity.—λ, The os ilium;—μ, Its anterior ſuperior ſpinous proceſs;—ν, Its anterior inferior ſpinous proceſs.—R, Joining of the os ilium and os pubis.—S, Os iſchium.—1. Spinous proceſs of the os iſchium.—2. Joining of the os ſacrum with the os ilium.—3. Symphyſis of the pubis.—4. The pelvis.—*f*, Ball of the thigh-bone.—*g*, Trochanter major.—*b*, Cervix of the thigh-bone.—15. Head of the fibula.—16. The ſpine, and—17. The inner edge of the tibia.—18. Under end of that bone.—*r*, Malleolus externus.—*t*, Malleolus internus.

FIG. 2.

Back-View of the Frontal Bone.

α, The ſuperior ſerrated edge, aſſiſting to form the coronal ſuture.—β, The external orbitar proceſs.—γ, The internal orbitar proceſs,—ε, The naſal proceſs.—ζ, The orbitar proceſs.—η, The frontal ſinus.—θ, The ſpace between the orbitar proceſſes for receiving the ethmoid bone.—*i*, The ſagittal ſuture continued in this bone to the root of the noſe.

FIG. 3.

The Inner Side of the Left Parietal Bone.

κ, Its ſuperior edge, which joined with the other parietal bone, forms the ſagittal ſuture.—λ, The anterior edge, which aſſiſts in the formation of the coronal ſuture.—μ, The inferior edge for the ſquamous ſuture.—ν, The poſterior edge for the lambdoid ſuture.—χ, A depreſſion made by the lateral ſinus.—ξ, The prints of the veſſels of the dura mater.

FIG. 4.

A Fore-View of the Occipital Bone.

ο, ο, The two ſides which aſſiſt to form the lambdoid ſuture.—π, An os triquetrum.—ρ, The extremity of the cuneiform proceſs, where it joins the ſphenoid bone.—ς, The exterior ſurface of the cuneiform proceſs.—τ, τ, The condyles.—υ, υ, The pits made by the poſterior lobes of the brain.—φ, φ, The pits made by the cerebellum.—χ, The groove for the ſuperior longitudinal ſinus made in a ridge of the bone.—ψ, ψ, The grooves of the lateral ſinuſes in a croſs ridge.—ω, The ridge to which the 4th proceſs of the dura mater is fixed.—α, Part of the hole common to the occipital bone, and right temporal bone.—β, The hole for the 9th pair of nerves.

FIG. 5.

The Inner Side of the Right Temporal Bone.

b, The edge which forms the ſquamous ſuture.—*c*, The prints of the convolutions of the brain.—*d*, The maſtoid part.—*e*, The ridge of the os petroſum.—*f*, The internal auditory hole.—*g*, The extremity of the pars petroſa, where the internal carotid artery enters the ſkull.

FIG. 6.

Internal View of the Sphenoid Bone.

1. The temporal plates.—2. The tranſverſe ſpinous proceſs.—3. The anterior clinoid proceſs.—4. The poſterior clinoid proceſs.—5. The print of the conjoined optic nerves.—6. The ſella turcica.—7. The poſterior part which joins the occipital bone.—8. Hole for the optic nerve.—9. The foramen lacerum.—10. Round hole for the 2d branch of the fifth pair of nerves.—11. Oval hole for the 3d branch of that pair of nerves.—12. Hole for the artery of the dura mater.—14. The internal pterygoid proceſs.—15. The external pterygoid proceſs.

FIG. 7.

Exterior View of the Ethmoid Bone.

E, The criſta galli.—F, The naſal plate.—G, The right ſuperior os turbinatum.—H, The right os planum.—L, The poſterior part which is joined to the ſphenoid bone.

FIG. 8.

Poſterior View of the two Nasal Bones.

A, Their upper,—B, B, Their outer,—C, Their under edges.

FIG. 9.

The Side of the Os Unguis next the Nose.

A, The orbitar part.—B, The lacrymal part.—C, The furrow between theſe two convex parts.

FIG. 10.

Poſterior View of the Os Malæ.

A, The ſuperior orbitar proceſs.—B, The inferior orbitar proceſs.—C, The maxillary proceſs.—D, The zygomatic proceſs.—E, The internal orbitar proceſs.—F, The hollow made by the temporal muſcle.

FIG. 11.

A View of the Lower Part and Side next the Noſe of the Left Os Maxillare, with the Palate Bone and Os Turbinatum Inferius.

γ, The naſal proceſs.—δ, The great tuber.—ε, The palate plate.—ζ, The naſal ſpine.—η, The orifice of the antrum maxillare.—κ, The os ſpongioſum, or turbinatum inferius.—λ, The two dentes inciſores.—μ, The caninus.—ν, The five dentes molares.—A, The palate bone.—i, Its naſal plate.—F, Its orbitar proceſs.

FIG. 12.

The Left Palate Bone.

A, The ſuperior ſide of its palate plate;—B, Its poſterior edge.—c, The anterior edge.—D, The naſal ſpine.—i, The naſal plate.—H, The ridge on which the os ſpongioſum inferius reſts.—E, The proceſs applied to the ſphenoid bone.—F, The orbitar proceſs.

FIG.

FIG. 13.

A View of the Inner Surface of the Right Side of the Lower Jaw.

1. Section of the chin.—2. The baſe of the jaw.—3. The angle.—4. The coronoid proceſs.—5. The condyle.—6, The rough print of the internal pterygoid muſcle.—7. The orifice of the paſſage for the nerve and blood-veſſels.—8. The five molares.

FIG. 14. From Malpighius.

A Tooth cut perpendicularly; magnified.

A, The fibres of the cortical part.—B, The bony part.—C, The entry for the veſſels and nerves.—D, The cavity of the tooth.

FIG. 15.

A View of the Interior Surface of the Base of the Skull.

D, D, D, The two tables of the ſkull with the diploe. ξ, ζ, The orbitar proceſſes of the frontal bone.—E, The criſta Galli, with the cribriform plate of the ethmoid bone on each ſide of it.—P, The imperforated part of the ethmoid bone.—1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. Parts of the ſphenoid bone, explained already in Figure 6.—13. The hole common to the temporal and ſphenoid bones.—14. 21. Parts of the ſphenoid ſutures.—*c*, *e*, *f*, See explanations in Figure 5.—*b*, The hole in the fore-ſide of the os petroſum.—*o*, The lambdoid ſuture.—φ, ψ, ω, See explanation of Figure 4.—A, The anterior ſide of the cuneiform proceſs of the occipital bone.—g, The print of the inferior petroſal ſinus.—*x*, The great hole for the ſpinal marrow.

FIG. 16.

Interior View of the Right Side of the Cranium, and Bones of the Upper Jaw.

D, D, The two tables and diploe of the frontal and occipital bones.—*a*, The coronal ſuture.—κ, The ſerrated edges of the parietal bone for forming the ſagittal ſuture.—ο, The lambdoid ſuture.—*b*, The ſquamous ſuture.—ξ, The furrows made by the veſſels of the dura mater.—ν, The frontal ſinus.—E, The criſta Galli.—F, The naſal lamella of the ethmoid bone.—1. The hollow wing of the ſphenoid bone.—6. The ſella turcica.—19. The ſphenoid ſinus.—18. The naſal plate of the ſphenoid bone.—20. The ſpongy ſubſtance of the ſphenoid and occipital bones.—β, The hole for the paſſage of the 9th pair of nerves.—*c*, The ſquamous part of the temporal bone.—*e*, The ridge of the os petroſum, with the print of a ſmall ſinus.—f, The internal meatus auditorius.—λ, The dentes inciſores.—μ, The canine tooth.—ν, The molares.—π, The foramen inciſivum of the maxillary bone.—ζ, The rough ſpine of the ſuperior maxillary bone.—φ, The joining of it to the vomer.—ρ, The broad hollow baſe of the vomer.—H, The poſterior edge of the vomer.—G, The body of the vomer.—τ, The conjunction of it with the thin plate of the ſphenoid and ethmoid bones.—χ, Its hollow anterior part, which receives the middle cartilage of the noſe.—P, The anterior edge of the naſal bone.

FIG. 17.

The External Surface of the Base of the Cranium and Upper Jaw.

o, The lambdoid ſuture.—*w*, The ſuperior horizontal ridge of the occipital bone.—*x*, A perpendicular ridge.—*y*, The inferior horizontal ridge.—*z*, The great hole for the ſpinal marrow.—τ, The condyle.—S, The cuneiform proceſs.—6. The hole common to the occipital and temporal bones.—*i*, The zygomatic proceſs.—K, The maſtoid proceſs of the temporal bone.—L, The ſtyloid proceſs.—*m*, The auditory proceſs.—*n*, The foſſa at the root of the maſtoid proceſs.—*p*, The cavity for the condyle of the jaw.—*q*, The tubercle of the root of the zygoma.—*r*, The concave moveable cartilage placed on that tubercle.—*t*, *t*, Its ligaments. (This cartilage is copied from a Figure publiſhed by Monro ſenior).—2. The hole for the portio dura of the 7th pair of nerves.—3. The external meatus auditorius.—4. The hole for the internal carotid artery.—5. The bony part of the Euſtachian tube.—1. 11. 12. 14. 15. 21. The ſame parts of the ſphenoid bone, as in explanation of Figures 6. and 15.—π, Paſſage under the zygoma for the tendon of the temporal muſcle.—H, The back-part of the ſeptum narium.—A, The palate bone.—*e*, Hole for the palate veſſels and nerves.—*f*, The tranſverſe palate ſuture.—φ, The longitudinal palate ſuture.—*k*, The ſpongy ſockets for the teeth.—*b*, Foramen inciſivum.—D, The zygomatic proceſs of the os malæ.—F, The hollow back-part of the os malæ.—*d*, The zygomatic. ſuture.

TAB. III.

FIG. 4.

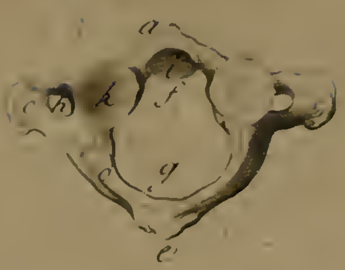


FIG. 3.

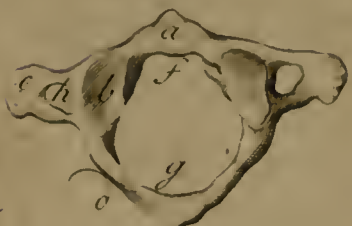


FIG. 5.

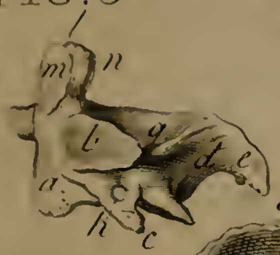


FIG. 6.

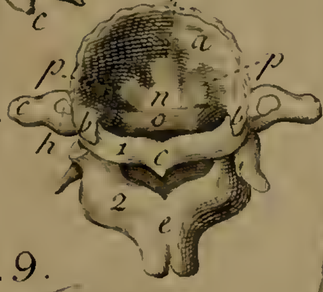


FIG. 9.

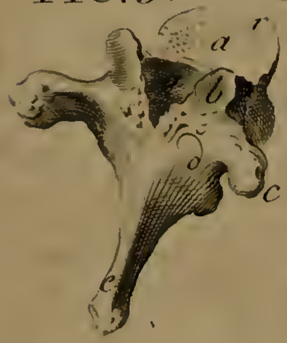


FIG. 11.

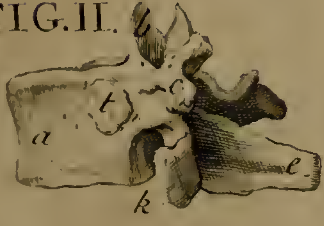


FIG. 10.

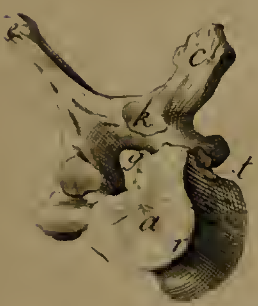


FIG. 14.

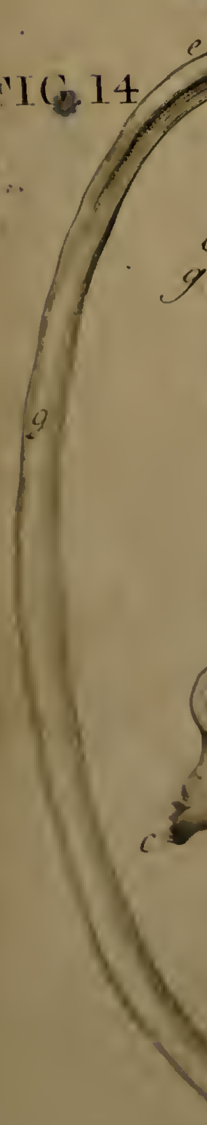


FIG. 13.

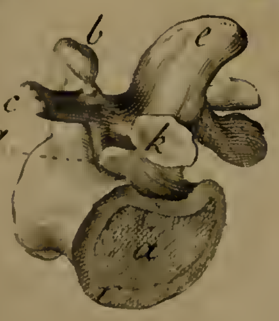


FIG. 12.

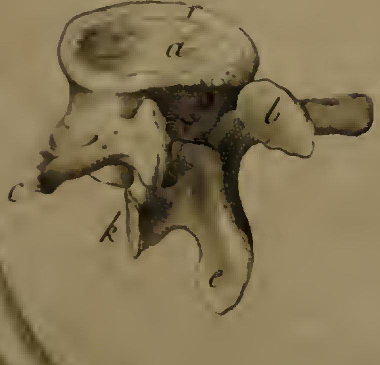


FIG. 17.

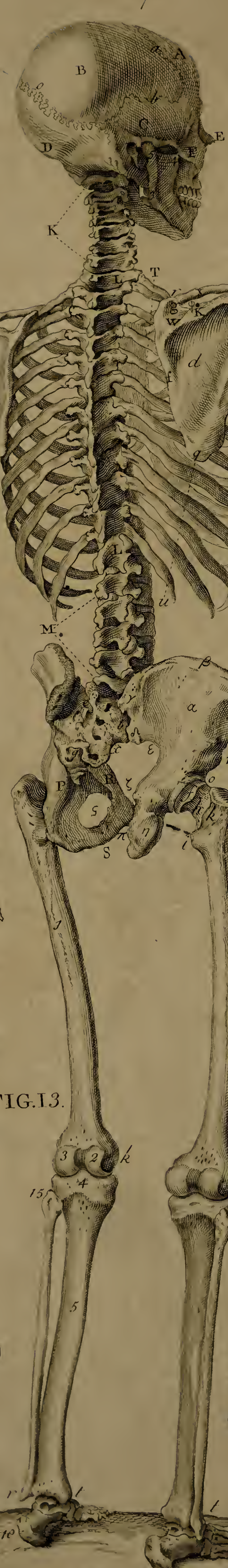


FIG. 7.

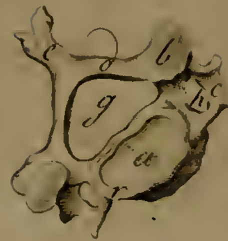


FIG. 8.

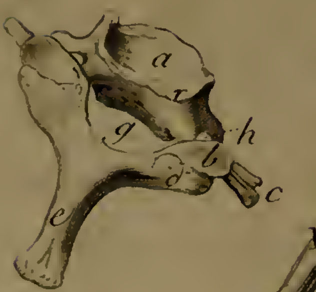


FIG. 2.

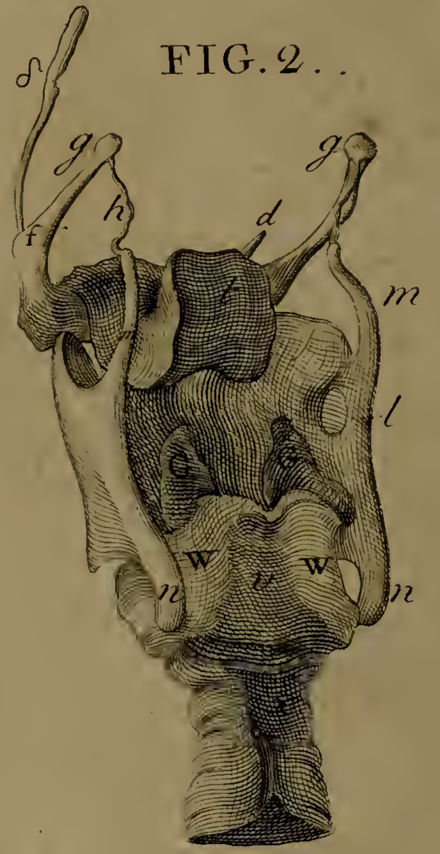


FIG. 1.

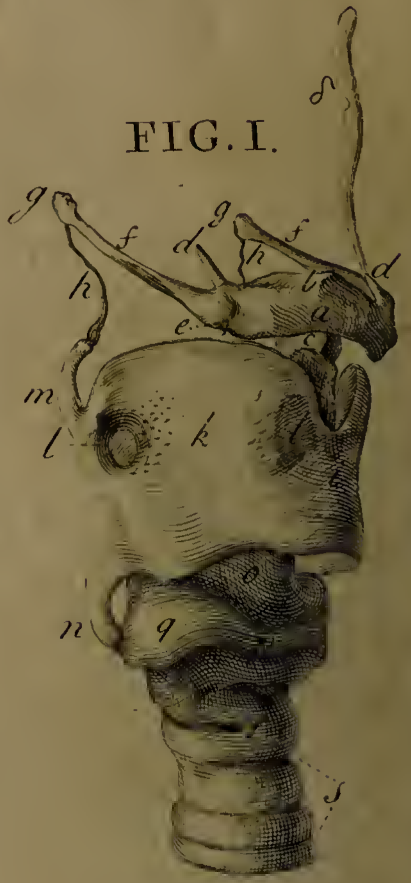


FIG. 18.

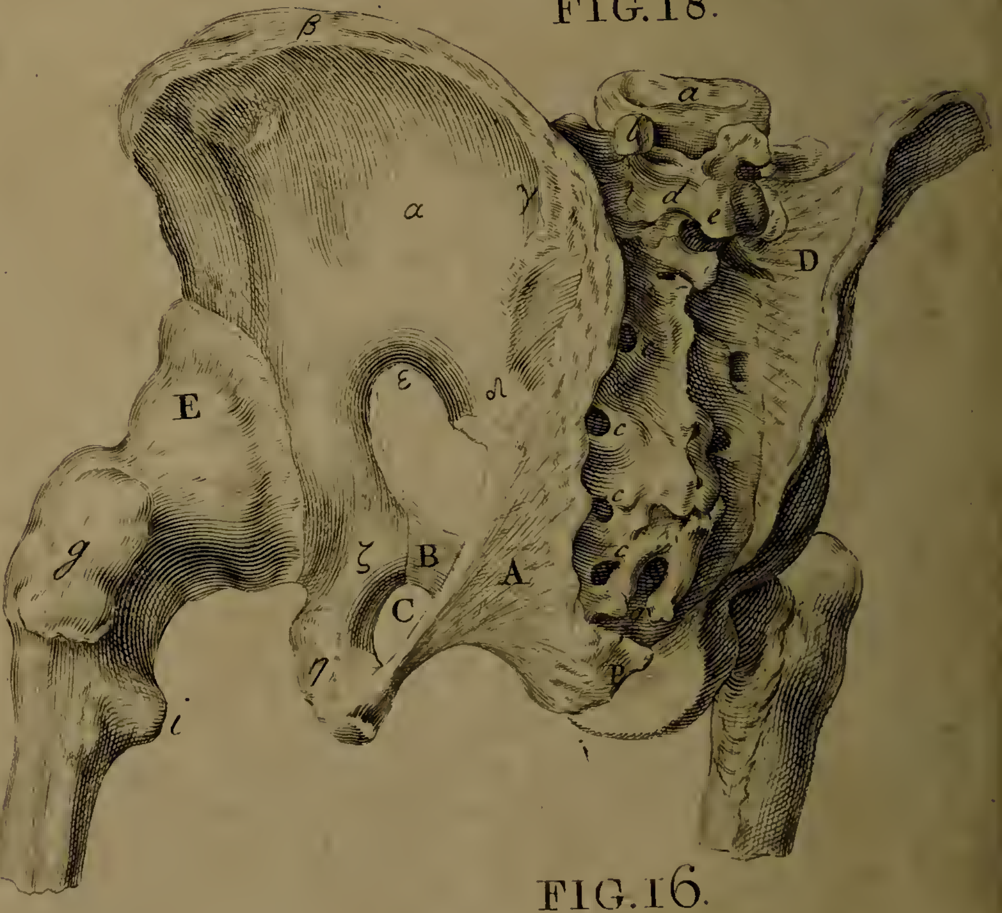


FIG. 16.

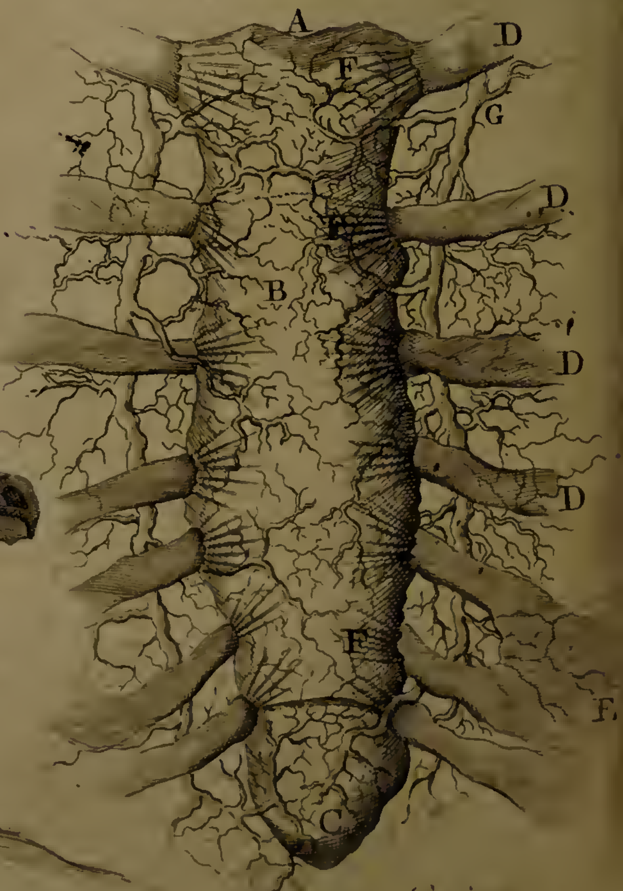


FIG. 15.

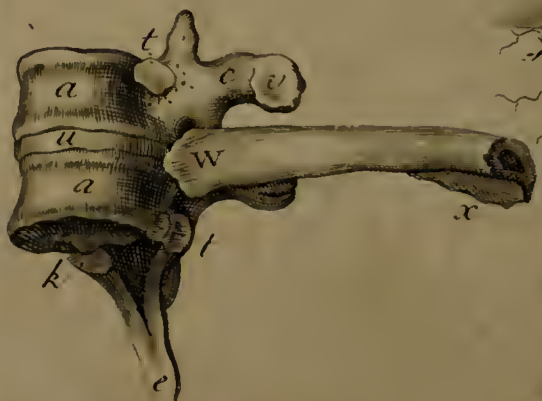


TABLE III.

Represents the Larynx, the Bones of the Trunk of the Body, and a Poſterior View of the Male Skeleton.—All the Figures copied from Cheselden, except the 1ſt, 2d, 6th, and 16th.

FIG. 1. From the Life.

Anterior View of the Cartilages of the Larynx, with the Os Hyoides.

a, The anterior ſurface of the baſe of the os hyoides;—*b*, Its ſuperior ſurface.—*c*, A ligament connecting the os hyoides, thyroid cartilage, and epiglottis.—*d*, *d*, The two appendices of the os hyoides.—*δ*, The ligament ſent out from the appendix of the left ſide, to the ſtyloid proceſs of the left temporal bone.—*e*, The union of the baſe with the cornu.—*f*, *f*, The two cornua.—*g*, *g*, Tubercles at their extremities.—*b*, *b*, Ligaments going from the tubercles to the ſuperior cornua of the thyroid cartilage.

i, The anterior middle part of the thyroid cartilage;—*k*, Its right ſide.—*l*, *l*, Two unoſſified cartilaginous pieces on that ſide.—*m*, The right ſuperior cornu.—*n*, The right inferior cornu connected to the cricoid cartilage.—*o*, A ſtrong ligament.

p, The narrow anterior part of the cricoid cartilage;—*q*, Its right ſide.—*r*, The firſt cartilage of the trachea arteria, divided into two at the ſides.

s, The 2d, 3d, and 4th cartilages of the trachea.

FIG. 2. From the Life.

Back View of the Parts repreſented in Fig. 1.

d, *δ*, *f*, *g*, *l*, *m*, *n*, The ſame parts pointed out by theſe letters in Fig. 1.

t, The epiglottis.

G, *G*, The two arytenoid cartilages.

v, The middle unoſſified part of the cricoid cartilage;—W, W, The bony ſides of that broad poſterior part.

X, The membranous back-part of the trachea.

N. B Theſe two Figures are as large as Life; whereas the Figures of particular bones in this and the preceding Table, are repreſented only one half as large as nature.

FIG. 3.

A View of the Upper Part of the firſt Vertebra of the Neck.

a, The body.—*b*, Superior oblique proceſs.—*c*, The tranſverſe proceſs.—*d*, The plate extended to—*e*, The ſpinal proceſs.—*f*, The hollow for receiving the tooth-like proceſs of the 2d vertebra.—*g*, The paſſage for the ſpinal marrow.—*b*, The hole in the tranſverſe proceſs.

FIG. 4.

The Under Part of the ſame Vertebra.

a, *c*, *d*, *e*, *f*, *g*, *b*, Explained in Fig. 3.—*i*, The ſmooth depreſſion for the anterior part of the tooth-like proceſs of the 2d vertebra.—*k*, The inferior oblique proceſs.

FIG. 5.

A Side View of the 2d Vertebra of the Neck.

a, *c*, *d*, *e*, *g*, *b*, As in the two preceding Figures.—*l*, The point of the tooth-like proceſs.—*m*, Its anterior ſmooth ſurface.—*n*, Its poſterior ſmooth ſurface.

FIG. 6. From Eustachius; with Additions from the Life.

The 1ſt and 2d Vertebræ of the Neck, with part of the Occipital Bone, and the Ligaments of the Tooth-Like Process.

a, Part of the occipital bone;—*b*, *b*, Its broken extremities.

1. Part of the 1ſt vertebra.—2. Part of the 2d vertebra.—*c*, *e*, *b*, As in Fig. 4. & 5.

n, The point of the tooth-like proceſs;—*o*, Its tranſverſe ligament;—*p*, *p*, Its two oblique, or moderator ligaments;—*q*, Its perpendicular ligament.

FIG. 7.

Upper Part of the 4th Vertebra of the Neck.

FIG. 8.

Upper Part of the 7th Vertebra of the Neck.

FIG. 9.

Upper Part of the 7th Vertebra of the Back.

FIG. 10.

Under Part of the 6th Vertebra of the Back.

FIG. 11.

Side View of the 12th Vertebra of the Back.

FIG. 12.

View of the Upper part of the 4th Vertebra of the Loins.

FIG. 13.

Under Part of the 3d Vertebra of the Loins.

In theſe Figures, 7. to 13. the ſame letters are put to the correſponding parts of the ſeveral vertebræ, as were employed in Figures 3. & 4. The explanation of which may ſuffice here, except that in all theſe, *r*, points the epiphyſe round the edges of the bodies of the vertebræ. And in Figure 10. *t*, is the depreſſion for the head of the rib.

FIG. 14.

The 7th true Rib of the Left Side.

a, Its head;—*b*, Its ſmooth ſurface, which was joined to the tranſverſe proceſs of the vertebra.—*c*, Depreſſion.—*d*, Tubercle.—*e*, Angle.—*f*, Furrow at the inferior edge.—*g*, Smooth internal ſide.—*b*, Anterior extremity.

FIG. 15.

The 6th and 7th Vertebra of the Back, with part of the 7th Rib of the Left Side.

a, *c*, *e*, *k*, *t*, As in Fig. 11.—*u*, The cartilage between the vertebræ.—*v*, The depreſſion made by the tubercle of the 6th rib.—W, The 7th rib articulated with the vertebra.—*x*, The beginning of the furrow on the under edge.

FIG. 16. From Ruysch.

The Sternum, with the Cartilage of the Ribs, and the Internal Mammary Arteries.

A, The 1ſt, or upper bone of the ſternum.—B, The 2d.—C, The 3d, or cartilago enſiformis.—D, D, D, D, The cartilages of the four ſuperior ribs.—E, The conjoined cartilages of the 5th, 6th, and 7th ribs.—F, F, F, The radiated ligaments connecting the cartilages to the ſternum.—G, The internal mammary artery.

FIG. 17.

Poſterior View of the Male Skeleton.

a, The coronal ſuture.—*b*, The ſquamous.—*o*, The lambdoid.

A, The frontal bone.—B, The right parietal bone.—C, The right temporal bone.—D, The occipital bone.—E, The naſal bone.—F, The os malæ.—3. The angle of the lower jaw;—4. Its right coronoid proceſs;—5. Its right condyle.

K, The ſeven vertebræ of the neck.—L, L, The twelve vertebræ of the back.—M, The five vertebræ of the loins.

b, The tranſverſe proceſſes of the os ſacrum.—*c*, The poſterior holes of that bone;—*e*, Its ſpinous proceſſes.—*g*, The open part of the canal for the cauda equina.—P, The os coccygis.

α, The dorſum of the os ilium;—β, Its ſpine.—γ, The ſuperior poſterior ſpinous proceſs.—δ, The inferior poſterior ſpinous proceſs.—ι, The great notch.—μ, The ſuperior anterior ſpinous proceſs.—ν, The inferior anterior proceſs.—ο, The brim of the acetabulum.

ζ, The ſpinous proceſs of the os iſchium.—η, The great knob of that bone;—S. Its branch.

R, The os pubis;—π, Its crus.

ς, The great thyroid hole.—*d*, Dorſum of the ſcapula;—*f*, Its poſterior coſta, or baſe of the bone;—*g*, Its ſuperior angle.—*p*, The anterior or inferior coſta.—*q*, The inferior angle.—*t*, The cervix of the bone.—*v*, The acromion, to which the outer end of the clavicle is joined.—K, The ſpine.—W, The foſſa above the ſpine.—φ, The ſuperior coſta, with the ſemilunar nitch.—*r*, The inner end of the clavicle, joined to the ſternum.—X, The body of the clavicle.—*x*, Ball of the os humeri.—*w*, Inner condyle of the os humeri of the left ſide.—*a*, The ulna.—*b*, The radius.—6. The head and neck of the radius.—7. 7. Olecranon of the ulna.—9. Under end of the radius.

Right Inferior Extremity.—*f*, Ball of the os femoris. *g*, Trochanter major.—*h*, Cervix of the bone.—*i*, Trochanter minor.—*k*, Upper part of the body of the bone;—*l*, Its outer condyle.—*t*, Malleolus externus of the fibula.

Left Inferior Extremity.—1. Linea aſpera on the back-part of the os femoris.—2. *k*, Inner condyle, and 3. Outer condyle of the os femoris.—4. Head of the tibia.—5. Body of the bone.—*t*, Malleolus internus of the tibia.—15. Head of the fibula.—*r*, Malleolus externus of that bone.—10. Os calcis.

FIG. 18.

Poſterior View of the Bones and Ligaments of the Pelvis.

a. The 5th lumbar vertebra;—*b*, Its ſuperior oblique proceſs.—*d*, The bony plate extended to its ſpinal proceſs *e*. ς,c,c,c The poſterior holes of the os ſacrum;~~—e, e, e,~~ ~~Its ſpinous proceſſes.~~—*g*, The channel for the cauda equina.

α, β. γ. δ, ι, ζ, η, as in Fig. 17.

A, The poſterior ſacro-iſchiatic ligament, extended from the tuber of the os iſchium to the os ilium, ſacrum, and coccygis.—B, The anterior ſacro-iſchiatic ligament proceeding from the ſpinous proceſs of the os iſchium, to the os ſacrum and coccygis.—ι, Notch of the os illium, for the paſſage of the poſterior crural veſſels and nerves, and the pyriform muſcle.—C, Paſſage of the obturator internus muſcle.—D, The fibrous ligamentous ſubſtance, connecting the os innominatum and ſacrum.

E, The capſular ligament of the joint of the thigh.

g, The greater,—*i*, The leſſer trochanter of the thigh-bone.

FIG. 1.

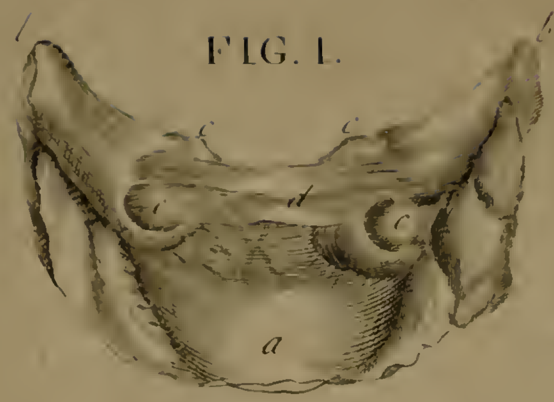


FIG. 2.

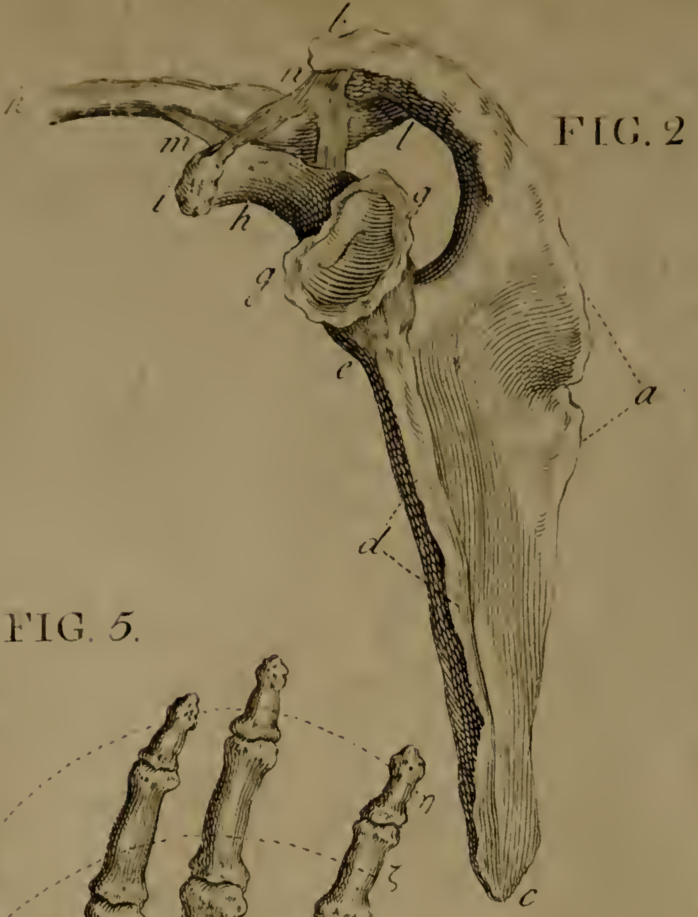


FIG. 3.

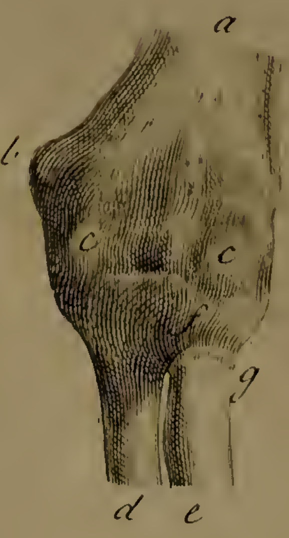


FIG. 4.

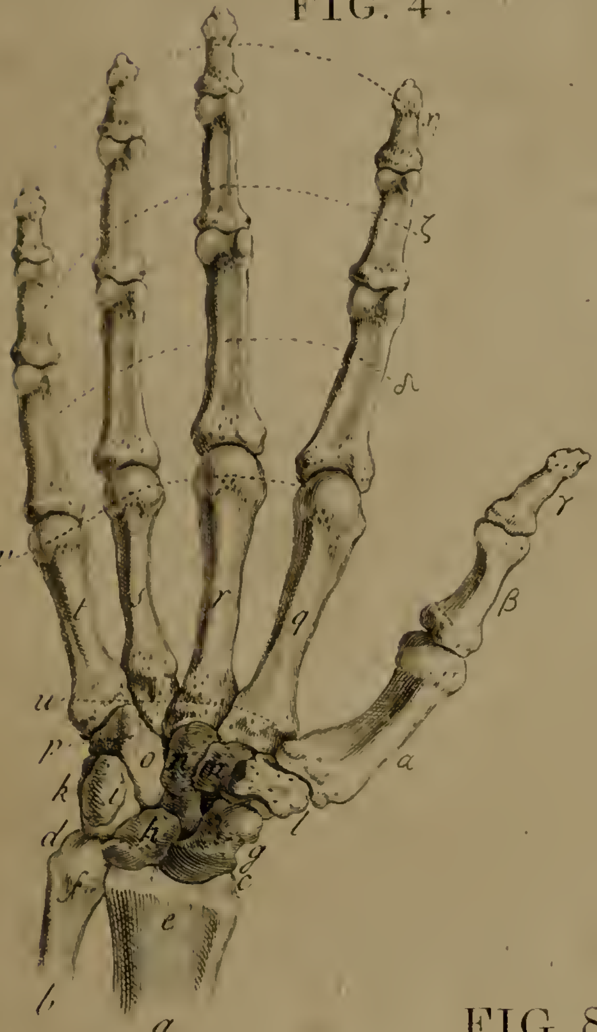


FIG. 5.

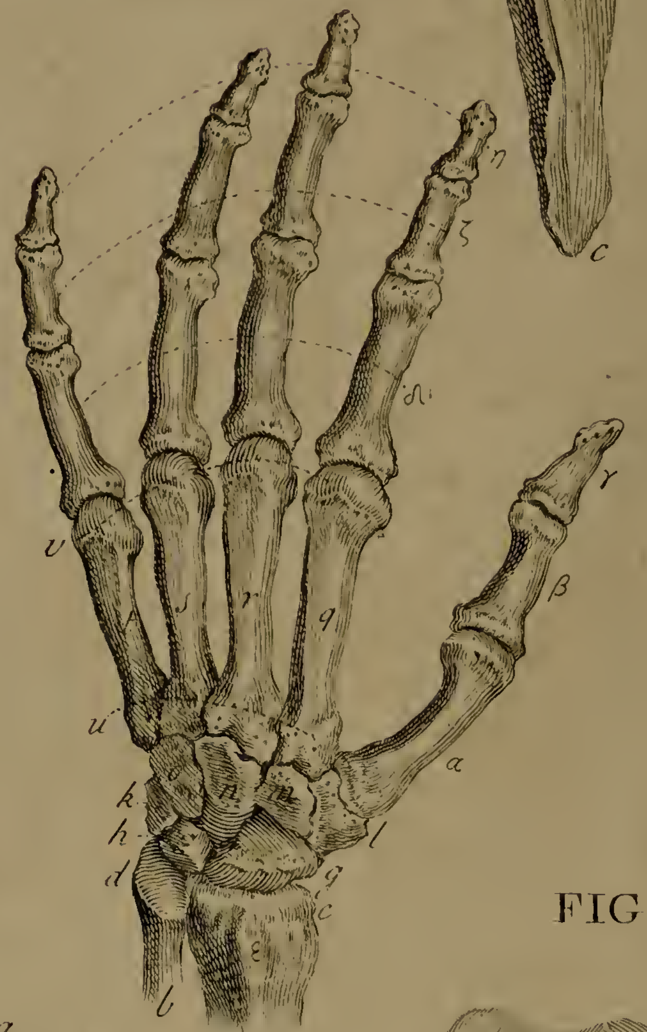


FIG. 6.

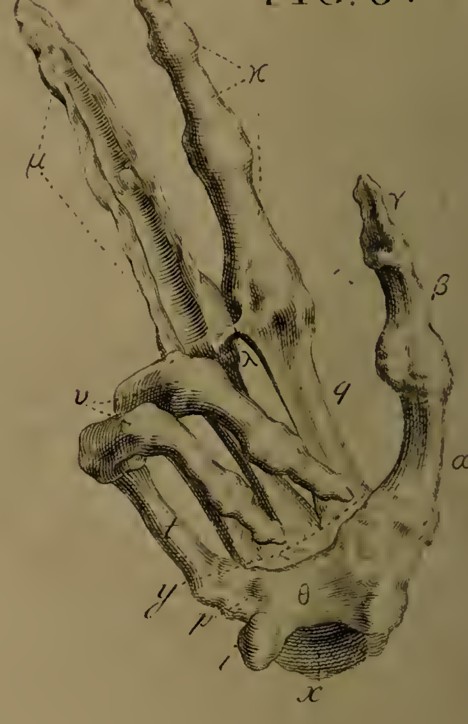


FIG. 7.

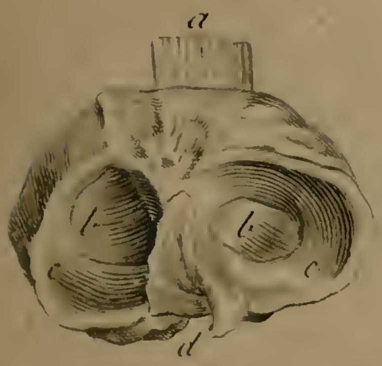


FIG. 8.

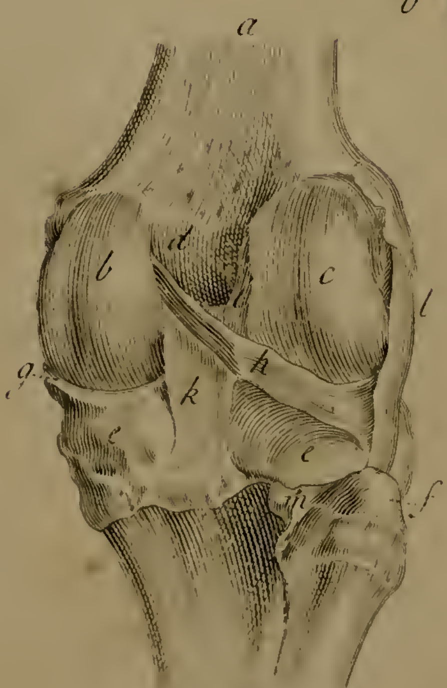


FIG. 9.

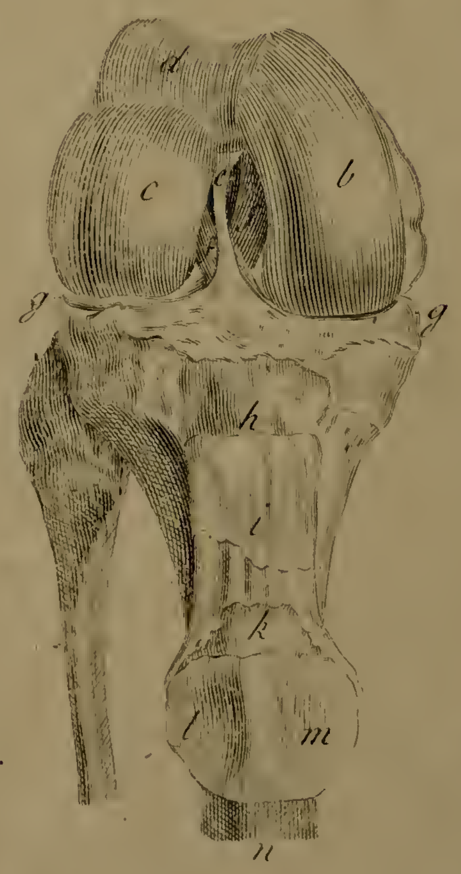


FIG. 10.

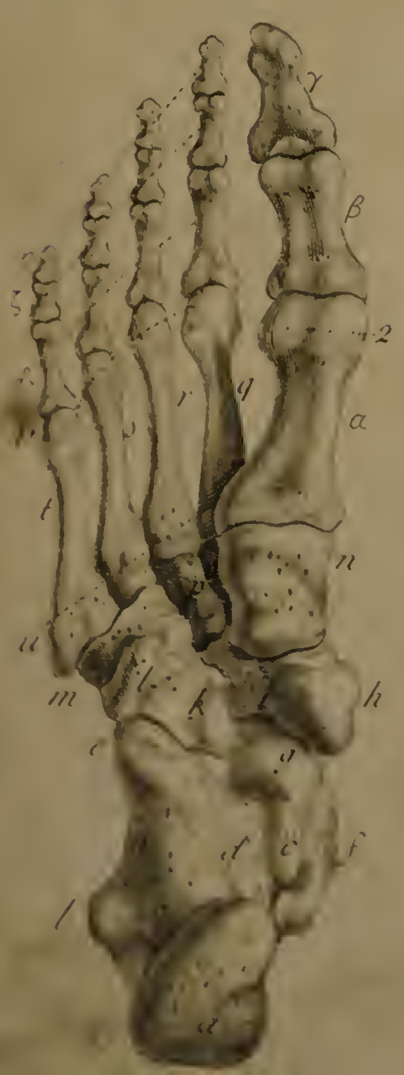


FIG. 11.

FIG. 12.

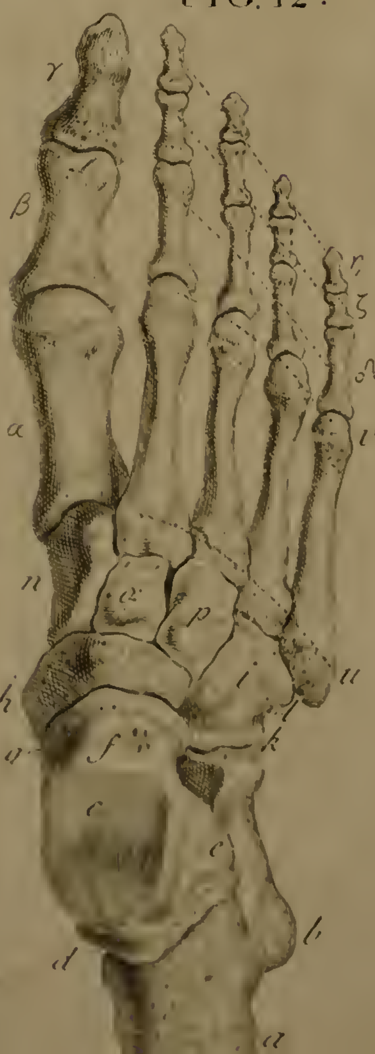


FIG. 14.

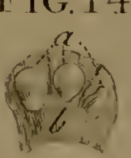


FIG. 13.

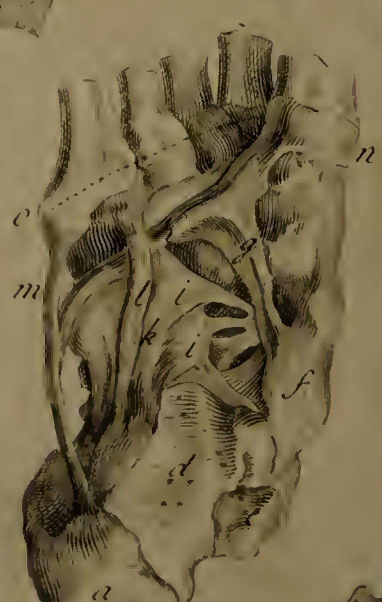


FIG. 15.

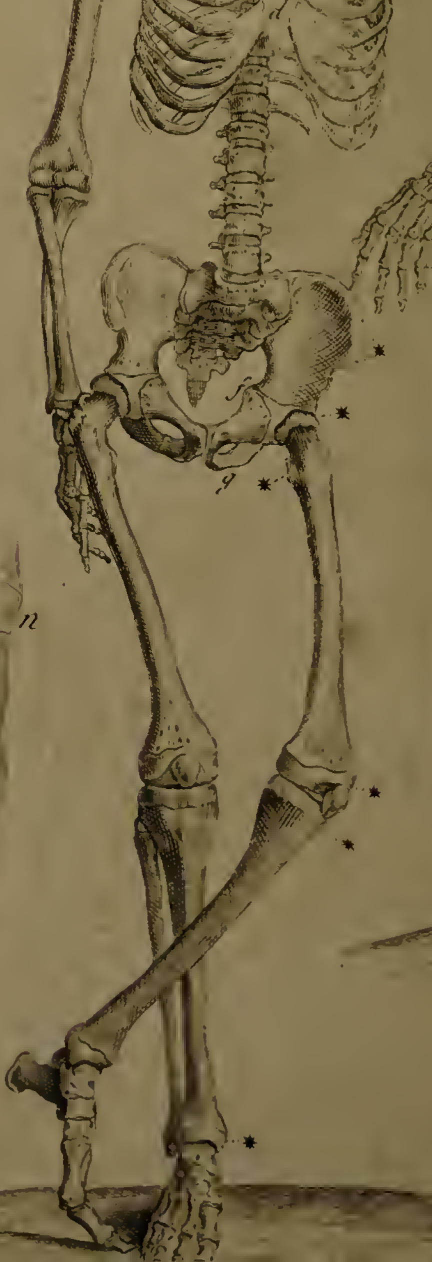


FIG. 16.

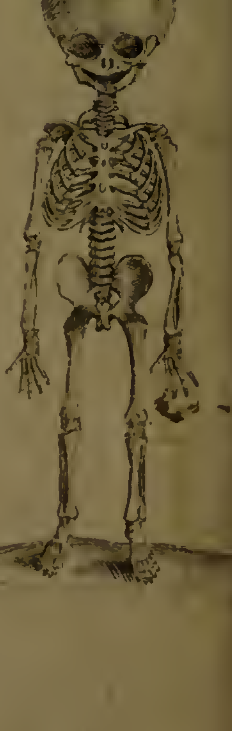


TABLE IV.

Represents the Bones of the Extremities, the Figures of which, excepting 1ſt, 3d, 14th, and 16th, are copied from Cheselden.

FIG. 1. From Weitbreicht.

A Poſterior View of Part of the Sternum and Clavicles, with the Ligament connecting the Clavicles to each other.

a, The poſterior ſurface of the ſternum.—*b*, *b*, The broken ends of the two clavicles.—*c*, *c*, *c*, *c*, The two tubercles near the extremity of each clavicle.—*d*, The ligament connecting the clavicles.

FIG. 2.

Outer and Fore View of the Left Scapula, and Part of the Clavicle, with their Ligaments.

a, The ſpine of the ſcapula.—*b*, The acromion—*c*, The inferior angle.—*d*, Inferior coſta.—*e*, Cervix.—*f*, Glenoid cavity, covered with cartilage for the articulation with the os humeri.—*g*, *g*, The cut edge of the capſular ligament of the joint of the arm.—*h*, Coracoid proceſs.—*i*, The point of that proceſs.—*k*, The broken end of the clavicle;—*l*, Its extremity joined to the acromion.—*m*, A ligament ſtretched obliquely from the clavicle to the coracoid proceſs.—*n*, A ligament coming out ſingle from the acromion, and dividing into two, which are fixed to the coracoid proceſs.

FIG. 3. From Nature.

The Joint of the Elbow of the Left Arm, with the Ligaments.

a, The os humeri;—*b*, Its internal condyle.—*c*, *c*, The two prominent parts of its trochlea appearing through the capſular ligament of the joint.—*d*, The ulna.—*e*, The radius.—*f*, The part of the ligament including the head of the radius.—*g*, The end of that ligament, like a ring, ſurrounding the neck of the radius, but connected very looſely to it.

FIG. 4.

Anterior View of the Bones of the Right Hand.

a, The radius;—*e*, Its flat anterior part;—*c*, Its ſtyloid proceſs.

b, The ulna;—*f*, Its flattened extremity;—*d*, Its ſtyloid proceſs.

g, The ſcaphoid bone of the carpus.—*h*, Os lunare.—*i*, Os piſiforme.—*k*, Cuneiforme.—*l*, Trapezium.—*m*, Trapezoides.—*n*, Capitatum.—*o*, Unciforme;—*p*, Its hook-like proceſs.

q, *r*, *s*, *t*, Metacarpal bones of the fingers;—*u*, Their baſe;—*v*, Their heads.

α, The metacarpal bone of the thumb;—β, Its firſt phalanx;—γ, Its ſecond phalanx.—δ, The phalanx of the four fingers;—ζ, Their ſecond phalanx.—η, Their third phalanx.

FIG. 5.

Poſterior View of the Bones of the Left Hand.

The explanation of Fig. 4. will ſerve for this Figure, the ſame letters pointing to the ſame bones, though in a different view.

ε, The ridge of the radius between the grooves made by the tendons of the extenſor muſcles.

FIG. 6.

Palm of the Right Hand, with its Ligaments.

i, The piſiform bone.—*p*, The hook-like proceſs of the unciform bone.—θ, The annular ligament, under which the tendons of the flexor muſcles paſs in the cavity *x*.

q,——*t*, The metacarpal bones;—*y*, Their baſes, with the ligaments connecting them to the bones, pointed out by *m*, *n*, *o*, in Fig. 4.

α, β, γ, The metacarpal bone, and two phalanges of the thumb, with the ligaments of their articulations.

χ, The fore-finger, with the ſheath for the tendons of the flexor muſcles entire.—λ, The ligament connecting the head of its metacarpal bone to that of the middle finger.—μ, The middle finger, with the ſheath of the tendons cut open.—ν, The ligaments on the back part of the ſecond joint of the ring and little fingers.

FIG. 7.

The Upper Extremity of the Tibia, with the Semilunar Cartilages of the Joint of the Knee, and ſome Ligaments.

a, The ſtrong ligament which connects the patella to the tubercle of the tibia.—*b*, *b*, The parts of the extremity of the tibia covered with cartilage, which appear within the ſemilunar cartilages.—*c*, *c*, The ſemilunar cartilages.—*d*, Part of the crucial ligaments.

FIG. 8.

Poſterior View of the Joint of the Right Knee.

a, Section of the os femoris;—*b*, Its internal condyle.—*c*, Its external condyle covered with cartilage.—*d*, The cavity between the condyles.—*e*, *e*, Back part of the tibia.—*f*, Superior extremity of the fibula.—*g*, Edge of the internal ſemilunar cartilage.—*h*, An oblique ligament.—*i*, A ſmall perpendicular ligament.—*k*, A larger perpendicular ligament.—*l*, External lateral ligament, connecting the femur and fibula.—*m*, A ligament between the tibia and fibula.

FIG. 9.

Anterior View of the Joint of the Right Knee.

b, The internal condyle.—*c*, The external.—*d*, Part of the os femoris on which the patella moves.—*e*, A perpendicular ligament.—*f*, *f*, The crucial ligaments.—*g*, *g*, The edges of the two ſemilunar cartilages.—*h*, The tibia—*i*, The ſtrong ligament of the patella.—*k*, The back-part of it, where ſome of the fat of the joint has been diſſected away.—*l*, The external depreſſion.—*m*, The internal one on the poſterior ſurface of the patella.—*n*, Section of the tibia.

FIG. 10.

A View of the Inferior Part of the Bones of the Right Foot.

a, The great knob of the os calcis.—*b*, A prominence on its outſide.—*c*, The interior thin proceſs bearing the print of the tendon of the flexor pollicis longus.—*d*, The hollow for the tendons, nerves, and blood-veſſels.—*e*, The anterior extremity of the os calcis.

f, Part of the aſtragalus;—*g*, Its head covered with cartilage.

a, The internal prominence of the os naviculare.—*i*, Its hollow in the ſole of the foot.

h, The os cuboides;—*l*, Its hollow for the tendon of the peroneus longus muſcle;—*m*, Its anterior extremity.

n, Os cuneiforme internum.—*o*, Medium.—*p*, Externum.—*q*, *r*, *s*, *t*, The metatarſal bones of the four leſſer toes;—*u*, Their baſes;—*v*, Their heads.

α, The metatarſal bone of the great toe;—β, Its firſt;—γ, Its ſecond bone.—2. The depreſſions on the head of the metatarſal bone for the two ſeſamoid bones.

δ, The firſt,—ζ, Second, and—η, Third phalanx of the four leſſer toes.

FIG. 11.

The inferior ſurface of the two large Seſamoid Bones, at the Firſt Joint of the Great Toe.

FIG. 12.

Upper View of the Bones of the Right Foot.

a, Poſterior knob of the os calcis;—*b*, Its exterior proceſs;—*k*, Its anterior extremity.

c, The

TABLE IV. CONTINUED.

c, The ſuperior head of the aſtragalus.—*d*, A depreſſion made by the tendon of the flexor pollicis longus.—*f*, The rough hollow part.—*g*, The anterior head.

h, Os naviculare.

i, Os cuboides.—*l*, The hollow for the peroneus longus muſcle.—*n*, The internal,—*o*, The middle,—*p*, The external cuneiform bones.—*u*, *v*, α, β, γ, δ, ζ, η, The ſame as in FIG. 10.

FIG. 13.

View of the SOLE of the FOOT, with its LIGAMENTS.

a, *d*, As in FIG. 10.—*e*, The ſheaths of the flexores longi pollicis et digitorum, opened.—*f*, The ſtrong cartilaginous ligament ſupporting the head of the aſtragalus.—*g*, *h*, Two ligaments which join into one, to be fixed to the metatarſal bone of the great toe.—*i*, *i*, *k*, *l*, *m*, Other ligaments.—*n*, *o*, The ligaments of the joints of the five metatarſal bones.

FIG. 14. From NATURE.

The Superior Concave Surface of the SESAMOID BONES at the Firſt JOINT of the GREAT TOE, with their LIGAMENTS.

a, Three ſeſamoid bones.—*b*, The ligamentous ſubſtance in which they are formed.

FIG. 15.

Front View of the SKELETON of a BOY of nine years of age.

* * &c. The moſt remarkable epiphyſes.—*f*, The joining of the os ilium and pubis; and—*g*, Of the os iſchium and pubis.

This Figure is done by a ſcale only half as large as that by which the Skeleton in TABLE I. *is done.*

FIG. 16. From NATURE.

The SKELETON of a NEW-BORN CHILD, where the ſhades and ſhriveling ſeen in the picture ſhew the parts which are cartilaginous at birth, and which are contracted in the ſkeleton.

a, The fontanelle.

This Figure is too ſmall, even in proportion to FIG. 15.

TAB. V.

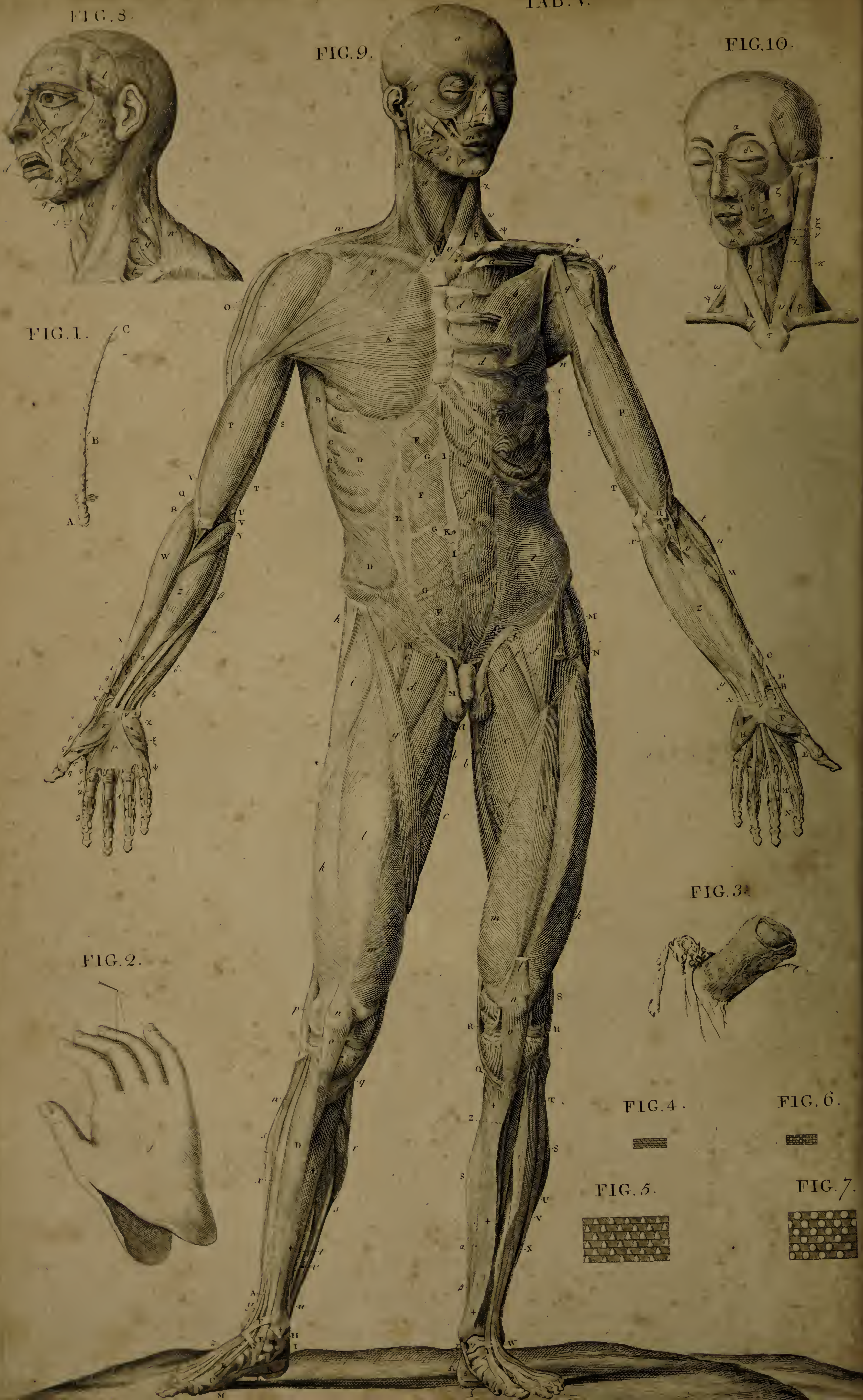


FIG. 8.

FIG. 9.

FIG. 10.

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

FIG. 6.

FIG. 5.

FIG. 7.

TABLE V.

REPRESENTS the common INTEGUMENTS; ſome of the MUSCLES and GLANDS of the HEAD and NECK; with the Firſt and Second LAYERS of MUSCLES on the Anterior Part of the whole BODY.

FIG. 1. From BIDLOO.

A HAIR viewed with a Microſcope.

A, THE root.—B, The bearded body.—C, The ſmall extremity.

FIG. 2. From RUYSCH.

The cuticula of the hand, with the nails adhering to it.

FIG. 3. From RUYSCH.

A toe, with the cuticula taken off, to ſhew the villous appearance of the exterior ſurface of the ſkin.

FIG. 4. From RUYSCH.

A piece of ſkin, according to Ruyſch, with the papillæ pyramidales, as they appear to the naked eye.

FIG. 5. From RUYSCH.

The piece of ſkin, FIG. 4. ſeen with a microſcope.

FIG. 6. From RUYSCH.

The corpus reticulare of the ſkin, ſeen with the naked eye.

FIG. 7. From RUYSCH.

The corpus reticulare, FIG. 6. viewed with a microſcope. Whether, upon comparing FIG. 3. with 4. 5. 6. 7. is there reaſon to ſuſpect that theſe four have been taken from the tongue?

FIG. 8. From COWPER.

The MUSCLES, GLANDS, &c. of the LEFT SIDE of the FACE and NECK, after the common INTEGUMENTS and PLATYSMA MYOIDES have been removed.

a, The frontal muſcle.—*b*, The temporal muſcle, on which the larger branches of the temporal artery are ſeen.—*c*, *c*, Muſc. orbicularis palpebrarum.—*d*, Orbicularis labiorum.—*e*, Levator labii ſuperioris.—*f*, Levator anguli oris.—*g*, Zygomaticus major.—*h*, Depreſſor anguli oris.—*i*, Depreſſor labii inferioris.—*k*, Buccinator.—*l*, Maſſeter.—*m*, Parotid gland;—*n*, Its duct.—*o*, *o*, The artery of the face.—*p*, *p*, The facial vein.—*q*, Anterior heads of muſc. digaſtrici.—*r*, Inferior maxillary gland.—*s*, Muſc. ſterno-hyoidei.—*t*, *t*, Omohyoideus.—*u*, Jugular vein.—*v*, Muſc. ſterno-maſtoideus.—*w*, Cucullaris.—*x*, Levator ſcapulæ.—*y*, Scalenus medius.—*z*, Scalenus anticus.—α, One of the nerves of the ſuperior extremity.

FIG. 9. From ALBINUS.

On the right ſide, the muſcles immediately under the common integuments, on the anterior part of the body, are repreſented; on the left ſide, the muſcles are ſeen, which come in view when the exterior ſet have been removed.

RIGHT SIDE.

HEAD.—*a*, Muſc. frontalis.—*b*, Its aponuerofis.—*c*, Attollens aurem.—*d*, Anterior auris.—*e*, *e*, Orbicularis palpebrarum.—*f*, Part of the corrugator.—*g*, Tendon or ligament of the palpebræ;——the letter is placed upon a fleſhy ſlip, which comes from the muſc. frontalis.—*h*, Compreſſor naris.—*i*, Four diſgregated muſcular ſlips, compoſing muſc. levator labii ſuperioris alæque naſi.—*k*, Zygomaticus minor.—*l*, Zygomaticus major.—*m*, Orbicularis oris.—*n*, Levator anguli oris.—*o*, Depreſſor anguli oris.—*p*, Depreſſor labii inferioris.—*q*, Levatores labii inferioris.—*r*, Buccinator.—*s*, Maſſeter.—*t*, Diſgregated fibres of the platyſma myoides.

NECK.—*u*, The thickeſt muſcular part of the platyſma myoides;—*v*, Its thin inferior extremity.—*w*, Part of muſc. cucullaris.—*x*, Sterno cleido-maſtoideus.—*y*, its tendinous extremity riſing from the ſternum.

TRUNK.—A, Muſc. pectoralis.—B, Part of latiſſimus dorſi.—C, C, C, C, Serrated extremities of the ſerratus anticus major. D, D, Fleſhy part of muſc. obliquus externus abdominis.—E, Part of the obliquus internus, ſeen through its aponeuroſis; through which alſo are ſeen,—F, F, F, The fleſhy portions of the rectus;—G, G, G, Its tendinous interſections; and—H, Muſc. pyramidalis.—I, I, Linea alba, with the interwoven tendinous fibres.—K, The umbilicus.—L, The ſpermatic cord, paſſing through the ring of the external oblique muſcle.—M, The fibres of the cremaſter ſpread upon the ſpermatic cord.—N, The lower edge of the external oblique muſcle.

SUPERIOR EXTREMITY.—O, Muſc. deltoides.—P, Belly of the biceps.—Q, The beginning of its tendinous aponeuroſis, which was ſpread over the muſcles of the fore-arm.—R, The round tendon of the biceps.—S, Long head of the triceps extenſor cubiti.—T, Short head of the triceps, called Brachialis externus;—U, Its tendon.—V, V, Parts of brachialis internus.—W, Supinator radii longus;—X, Its tendon.—Y, Pronator radii teres.—Z, Flexor carpi radialis;—α, Its tendon.—β, Palmaris longus;—γ, Its tendon.—δ, δ, Parts of the flexor digitorum ſublimis.—ε, Tendon of the flexor carpi ulnaris.—ζ, Flexor longus pollicis;—η, Its tendon, inſerted into the laſt joint of the thumb.—θ, Part of the pronator quadratus radii.—ι, Part of the extenſor 1mi et 2di internodii pollicis;—κ, Their tendons;—λ Their annular ligament.—μ, The tendinous aponeuroſis of the palm.—ν, Tranſverſe ligament of the wriſt—ξ, Palmaris brevis.—ο, Part of flexor 1mi internodii pollicis.—π, Abductor pollicis.—ρ, Its tendon, forming an aponeuroſis, with the extenſors.—ς, Part of the flexor 2di internodii.—τ, Annular ſheath of the tendon of the flexor 3tii internodii.—υ, Part of the adductor pollicis.—φ, Tendons of the adductor indicis, and firſt lumbricalis.—χ, Abductor minimi digiti.—ψ, Flexor brevis minimi digiti.—1. 2. 3. The annular ſheaths of the tendons of the flexors of the fore-finger. Theſe ligaments are alſo repreſented in the other fingers.—4. Tendons of the lumbricales and interoſſei, which may alſo be ſeen on the ſides of the other fingers.

INFERIOR EXTREMITY.—*a*, Part of the gluteus maximus.—*b*, Muſc. gracilis.—*c*, *c*, Parts of the triceps.—*d*, Pectineus.—*e*, Pſoas magnus.—*f*, Iliacus internus.—*g*, Sartorius.—*h*, Part of gluteus maximus.—*i*, Tenſor vaginæ femoris.—*k*, Vaſtus externus.—*l*, Rectus cruris.—*m*, Vaſtus internus.—*n*, Patella ſeen through the aponeurotic expanſion of the extenſors of the leg.—*o*, Ligament connecting the patella to the tibia.—*p*, Part of the biceps flexor cruris.—*q*, Tendons of the Sartorius, gracilis, and ſemi-tendinoſus.—+ + + Tibia.—*r*, Part of the gemellus.—*s*, *s*, Parts of the Soleus.—*t*, Part of the flexor longus digitorum.—*u*, Tendon of the tibialis poſticus.—*v*, Tendon of plantaris.—*w*, Part of peroneus longus.—*x*, Extenſor digitorum longus;—*y*, Its tendons at the ankle;—*z*, On the ſuperior part of the foot.—A, Extenſor pollicis longus;—B, Its tendon;—C, Its aponeuroſis, joining with the tendon of the abductor pollicis.—D, Tibialis anticus.—E, Tendon of tibialis anticus.—F, An oblique ligamentous band.—G, A tranſverſe one, for keeping down the tendons.—H, Ligaments of the tendons at the inner ankle.—I, Tendon of the tibialis poſticus.—K, Muſc. abductor pollicis.—L, Part of the flexor brevis digitorum.—M, Tendon of the flexor longus pollicis.

FIG. 10. From A[illegible]INUS.

The ſecond Layer of MUSCLES of the FACE and NECK, after the Firſt has been removed.

α, Muſc. corrugator.—β, Temporalis;—γ, Its tendinous part.—*, Zygoma.—δ, Tendon of the levator palpebræ ſuperioris.—ε, Tendon of the internal angle of the eye-lids.—ζ, Muſc. maſſeter.—η, Buccinator.—θ, Levator anguli oris.—ι, Depreſſor alæ naſi, et naſalis labii ſuperioris.—κ, Orbicularis oris.—λ, Depreſſor labii inferioris.—μ, Levator labii inferioris.—ν, Os hyoides.—ξ, Muſc. hyogloſſus.—π, Hyo-thyroideus.—ρ, ρ, Omo-hyoidei.—ς, ς, Sterno hyoidei.—τ, Firſt bone of the ſternum.—υ, Tendinous beginning of ſterno-maſtoideus.—φ, Origin from the clavicle.—χ, The belly formed by their union.—ψ, Part of muſc. ſcalenus medius.—ω, Part of levator ſcapulæ.

LEFT

LEFT SIDE of FIG. 9.

NECK. ρ, σ, υ, φ, χ, ψ, ω, Point out the ſame parts as in FIG. 10.

TRUNK.—*a*, Muſc. ſubclavius.—*b*, Pectoralis minor.—*c*, *c*, Extremities of ſerratus anticus major.—*d*, *d*, Part of the internal intercoſtal muſcles, the aponeuroſis which covers them at this part being removed.—*e*, Obliquus internus abdominis.—*f*, *f*, *f*, *f*, *f*, Fleſhy parts of the rectus abdominis.—*g*, *g*, *g*, *g*, Tendinous interſections of that muſcle.—*h*, Pyramidalis.—*i*, Cremaſter teſtis.—*k*, Spermatic cord.—*l*, Cremaſter ſpread over the ſpermatic cord, and vaginal coat of the teſticle.

SUPERIOR EXTREMITY.—* * The two articulations of the clavicle.—*m*, Muſc. ſubſcapularis.—*n*, Teres major.—*o*, Part of the ſupraſpinatus.—*p*, Long head of the biceps;—*q*. Its ſhort head;—P, Its belly.—Q, Aponeurotic tendon.—R, Round tendon.—*r*, Coraco-brachialis.—S, Long head of the triceps extenſor cubiti.—T, Brachialis externus.—*s*, Brachialis internus,—*t*, Extenſor carpi radialis longior.—*u*, Part of the extenſor carpi radialis brevior.—*v*, Supinator radii brevis.—*w*, Cut extremity of pronator radii teres.—*x*, Part of flexor carpi ulnaris;—*y*, Its tendon.—*z*, Flexor digitorum ſublimis;—A, Its tendon.—B, Part of the pronator radii quadratus.—C, The extenſors of the thumb.—D, Flexor pollicis longus;—E, Its tendon near its inſertion.—F, Flexor oſſis metacarpi pollicis.—G, Flexor brevis pollicis.—H, Flexor parvus minimi digiti.—I, Abductor minimi digiti.—K, K, The 1ſt and 2d lumbricales; the 3d and 4th are alſo in view, but unlettered.—L, Tendons of lumbricales and interoſſei, which may alſo be ſeen on the ſides of the other fingers.—M, The tendons of the flexor digitorum ſublimis, divided near their inſertion, for the paſſage of the tendons of the flexor profundus, marked N.

INFERIOR EXTREMITY.—*b*, Gracilis.—*c*, *c*, Adductor longus, and a ſmall part of adductor magnus femoris.—*d*, Pectineus.—*e*, Pſoas magnus.—*f*, Iliacus internus.—M, Part of gluteus medius.—N, Part of gluteus minimus.—O, Cut extremity of the rectus.—*k*, Vaſtus externus.—*l*, Tendon of the rectus.—*m*, Vaſtus internus.—*n*, Patella ſeen through the aponeuroſis.—*o*, Ligament of the patella.—P, Crureus.—Q, Tendons of the gracilis and ſemitendinoſus.—R, R, Edges of the moveable cartilages.—S, *p*, Part of biceps flexor cruris.—+ + + Tibia.—S, S, Part of ſoleus.—T, Part of peroneus longus.—U, Part of peroneus brevis.—V, Extenſor longus digitorum;—W, Its tendons.—X, Extenſor proprius pollicis.—Y, Its tendon.—Z, Tibialis poſticus.—α, Part of flexor longus digitorum.—β, Tendon of plantaris.—γ, Tendons of tibialis poſticus, and of flexor longus digitorum.—δ, Part of the tendo Achillis.—ε, Flexor digitorum acceſſorius.—ζ, Flexor brevis digitorum.

TAB.VI

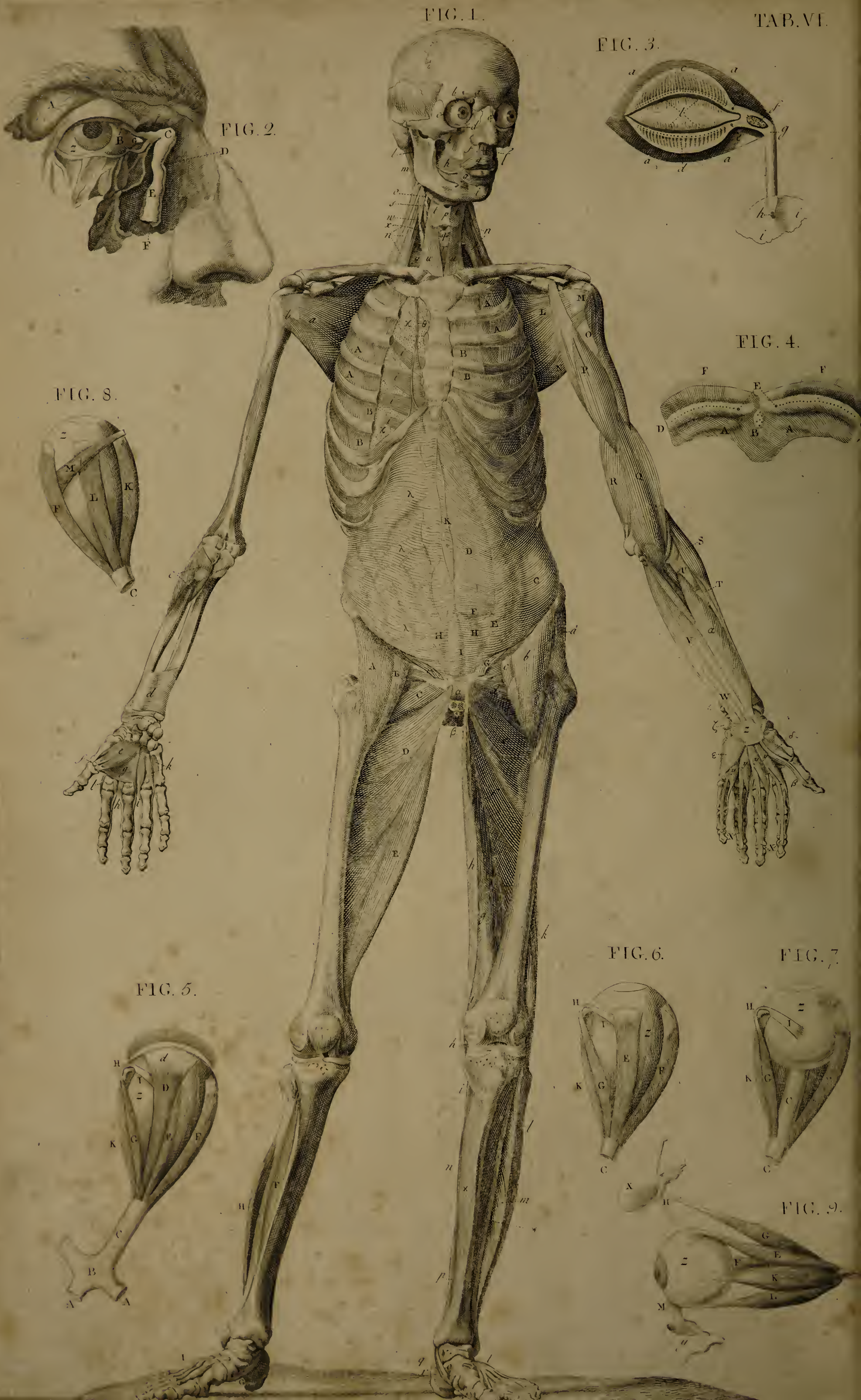


FIG. 1.
FIG. 2.
FIG. 3.
FIG. 4.
FIG. 5.
FIG. 6.
FIG. 7.
FIG. 8.
FIG. 9.
A
B
C
D
E
F
G
H
I
K
L
M
N
O
P
Q
R
S
T
V
W
X
Z
a
b
c
d
e
f
g
h
i
k
l
m
n
o
p
q
s
u
w
x
α
β
γ
δ
ε
ζ
θ
λ
χ

TABLE VI.

REPRESENTS the Parts ſituated under thoſe ſhewn in FIG. 9. TABLE V. together with the EYE-LIDS, LACRYMAL GLAND and DUCTS, and MUSCLES of the EYE.

All the Figures in this Plate, except the firſt, are as large as the Life.

FIG. I. Principally from ALBINUS.

HEAD and NECK.

a, The tendon of the muſc. trochlearis of the eye paſſing through the pully.—*b*, Muſc. attollens oculum.—*c*, Abductor oculi.—*d*, Obliquus minor.—*e*, Adductor.—*f*, *f*, Depreſſor labii ſuperioris alæque naſi.—*g*, *g*, Orbicularis oris.—*h*, Buccinator.—*i*, Levator labii inferioris.—*k*, The pterygoideus externus.—*l*, Complexus.—*m*, Trachelo-maſtoideus,—*n*, *n*, Anterior and middle ſcaleni.—*o*, Os hyoides.—*p*, Thyroid cartilage.—*q*, Cricoid cartilage, with the two crico-thyroid muſcles riſing from it.—*r*, The trachea arteria.—*s*, Part of the conſtrictor-pharyngis inferior muſcle.—*t*, *t*, The two thyro-hyoid muſcles.—*u*, *u*, The two ſterno-thyroid muſcles.—*w*, Part of the rectus internus major capitis.—*x*, Part of the longus colli.—*y*, Part of the pleura.

LEFT SIDE of the TRUNK.

A, A, External intercoſtal muſcles.—B, B, Internal intercoſtal muſcles.—C, Tranſverſe muſcle of the abdomen;—D, Its tendon.—E, F, The edges of this muſcle and its tendon, where that part of the tendon is cut away which, joining with the tendons of the oblique muſcles, paſſes before the rectus.—G, The ſpermatic veſſels, and vas deferens, coming out below the edge of the tranſverſe muſcle.—H, H, The veſtiges of the two umbilical arteries; and—I, The print of the urachus on the peritoneum.—K, The remains of the tendons of the oblique muſcles forming the linea alba.—α, Corpora cavernoſa penis.—β, Corpus cavernoſum urethræ, cut tranſverſely.

LEFT ARM.

L, Muſc. ſubſcapularis;—M, Its tendon.—N, Teres major;—O, Its tendon.—P, Coraco-brachialis—Q, Brachialis internus.—R, Brachialis externus.—S, Extenſor carpi radialis longior.—T, Part of the extenſor carpi radialis brevior.—U, Supinator radii brevis.—V, Flexor digitorum profundus,—W, dividing into its tendons.—X, X, Their inſertions into the laſt joint of each of the fingers.—Z, The tranſverſe ligament of the wriſt.—*y*, *y*, *y*, *y*, The four muſc. lumbricales.—α, Flexor longus pollicis.—β, Its tendon inſerted into the laſt joint of the thumb.—δ, Flexor brevis pollicis.—ε, Adductor oſſis metacarpi minimi digiti.—ζ, Os piſiforme.

LEFT INFERIOR EXTREMITY.

a, Gluteus minimus.—*b*, Iliacus internus.—*c*, Pſoas magnus.—*d*, Obturator externus.—*e*, Adductor brevis.—*f*, *g*, Part of adductor magnus.—*h*, *h*, Gracilis.—*i*, *i*, Part of the Semimembranoſus.—*k*, Part of the biceps flexor curis.—+, The tibia.—*, The fibula.—*l*, Peroneus longus.—*m*, Peroneus brevis.—*n*, Tibialis poſticus, ſeen obſcurely between the two bones.—*o*, The tendon of the tibialis poſticus.—*p*, Part of the flexor longus digitorum.—*q*, Its tendon.—*r*, Maſſa carnea, or flexor digitorum acceſſorius.—*s*, Tendon of flexor longus pollicis.—*t*, Extenſor brevis digitorum.

RIGHT SIDE of the TRUNK.

A, A, External intercoſtals.—B, B, Internal intercoſtals.—θ, The mammary artery and vein, added from the life.—*i*, *i*, *i*, *i*, The triangularis, or ſterno-coſtalis.—κ, κ, The ſurface of the lungs appearing through the pleura.—λ, λ, λ, The peritoneum, through which the bowels appear obſcurely, copied from the life.—μ, The ſpermatic cord coming out behind the peritoneum.

RIGHT ARM.

a, Muſc. ſubſcapularis;—*b*, Its tendon.—*c*, Supinator radii brevis.—*d*, Pronator radii quadratus.—*e*, Flexor brevis pollicis.—*f*, The ſeſamoid bones into which it is inſerted.—*g*, Adductor pollicis.—*h*, *i*, *k*, *l*, Seven interoſſei.

RIGHT INFERIOR EXTREMITY.

A, Muſc. iliacus internus.—B, Pſoas magnus.—C, Obturator externus.—D, E, Adductor magnus.—F, Tibialis poſticus;—G, Its tendon.—H, Peroneus brevis.—I, Interoſſei.

FIG. 2. From LE CAT.

Shews the LACRYMAL CANALS, the Teguments and Bones being cut away.

A, The lacrymal gland.—B, The two puncta lacrymalia, from which the two lacrymal canals proceed to—C, The lacrymal ſac.—D, A contraction forming the beginning of—E, The lacrymal duct.—F, Its opening into the noſe.—G, The caruncula lacrymalis.—Z, The eye.

FIG. 3. From MORGAGNI.

The PALPEBRÆ inverted, to ſhew the LACRYMAL CANALS.

a, *a*, *a*, *a*, The interior membrane of the eye-lids.—*b*, The ciliary cartilages.—*c*, *d*, The ſebaceous glands, the extremities of the excretory ducts of which open near the edges of the palpebræ.—*e*, *e*, The two puncta lacrymalia.—*f*, The caruncula lacrymalis, from which ſmall hairs ſtand out.—*g*, The lacrymal ſac.—*h*, The opening of the lacrymal ducts into the noſe.—*i*, *i*, Part of the membrane of the noſe.

FIG. 4. From RUYSCH.

The two EYE-LIDS cut from each other, at the exterior CANTHUS.

A, A, The interior membrane of the eye-lids.—B, The caruncula lacrymalis.—C, D, The edges of the eye-lids, with the ſmall orifices of the excretory ducts of the ſabaceous glands.—E, The puncta lacrymalia.—F, F, The eye-laſhes.

FIG. 5. 6. 7. 8. From EUSTACHIUS.
And FIG. 9. From COWPER.

Shew the MUSCLES of the EYE.

A, A, The two optic nerves before they meet.—B, Theſe nerves conjoined.—C, The nerve of the right-eye.—D, Muſc. attollens palpebram;—*d*, Its tendon.—E, Attollens oculum.—F, Abductor.—G, Obliquus ſuperior, or trochlearis;—H, I, Its Tendon.—K, Adductor.—L, Deprimens.—M, Obliquus minor.—Z, The ball of the eye.—X, Part of the frontal bone.—*y*, Part of the maxillary bone.

TAB. VII.

FIG. 1.

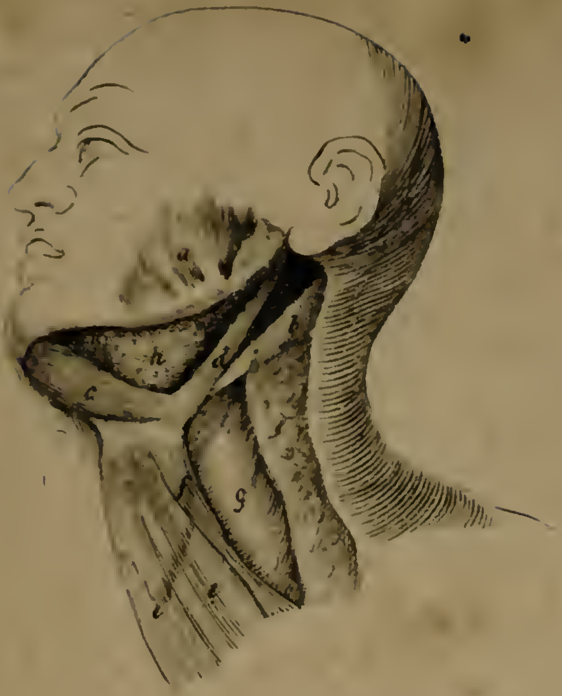


FIG. 2.

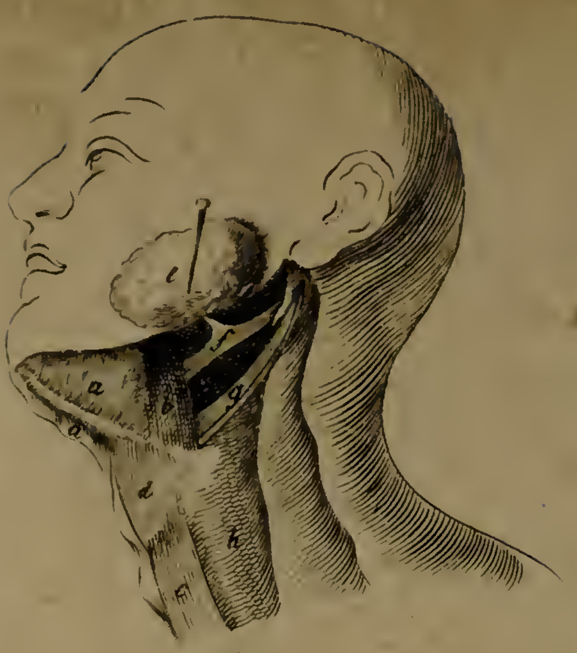


FIG. 3.

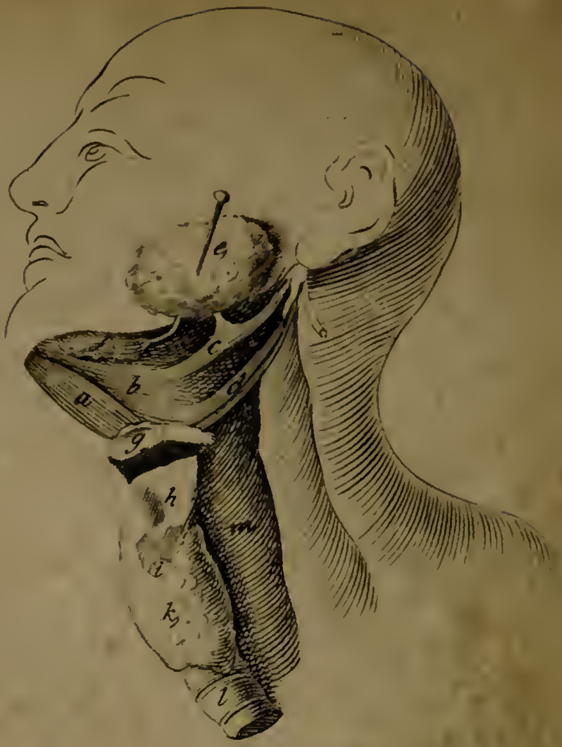


FIG. 6.

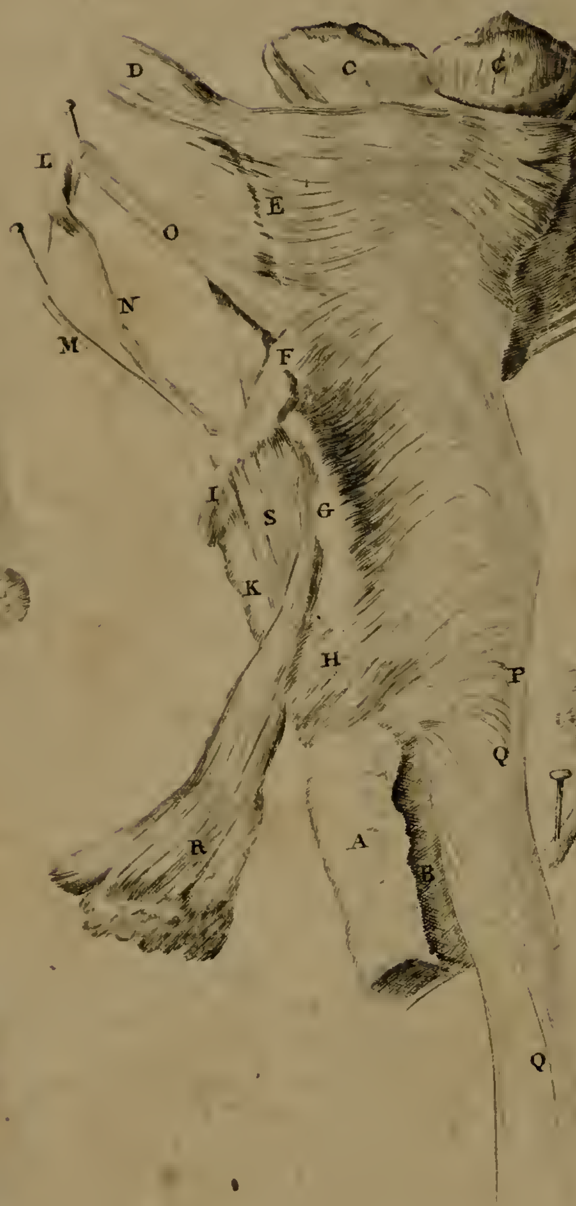


FIG. 7.

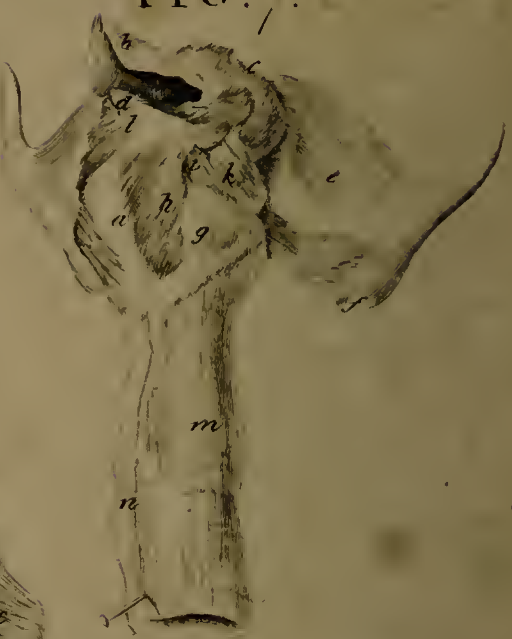


FIG. 5.

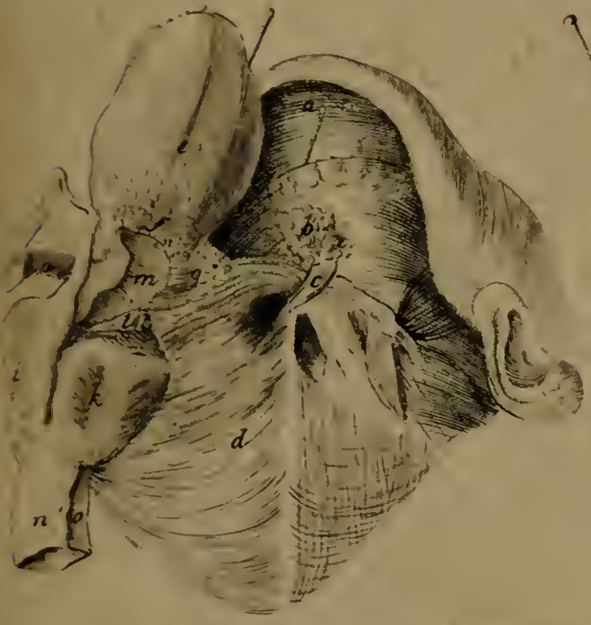


FIG. 4.

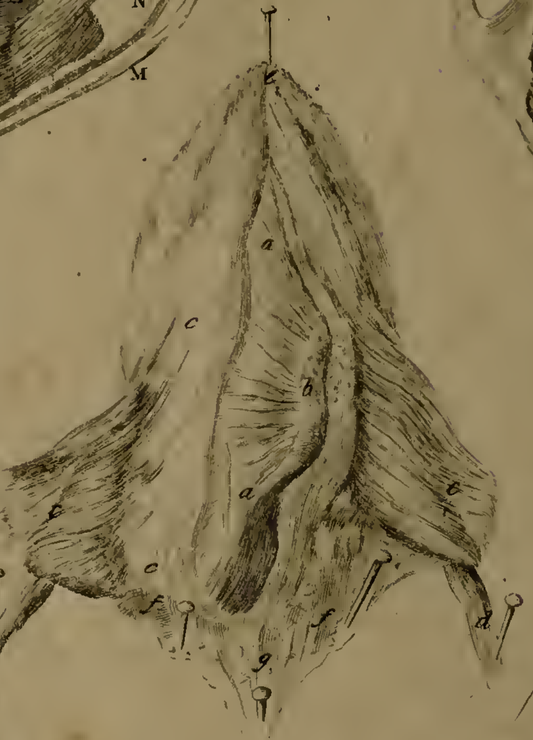


FIG. 8.

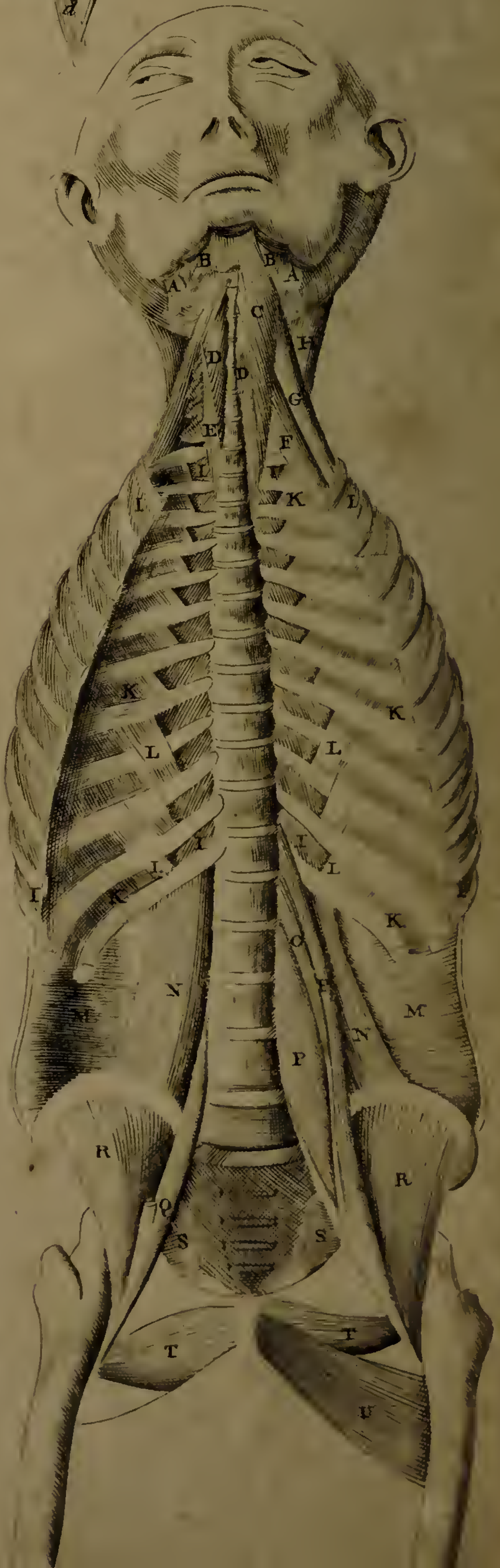


FIG. 9.

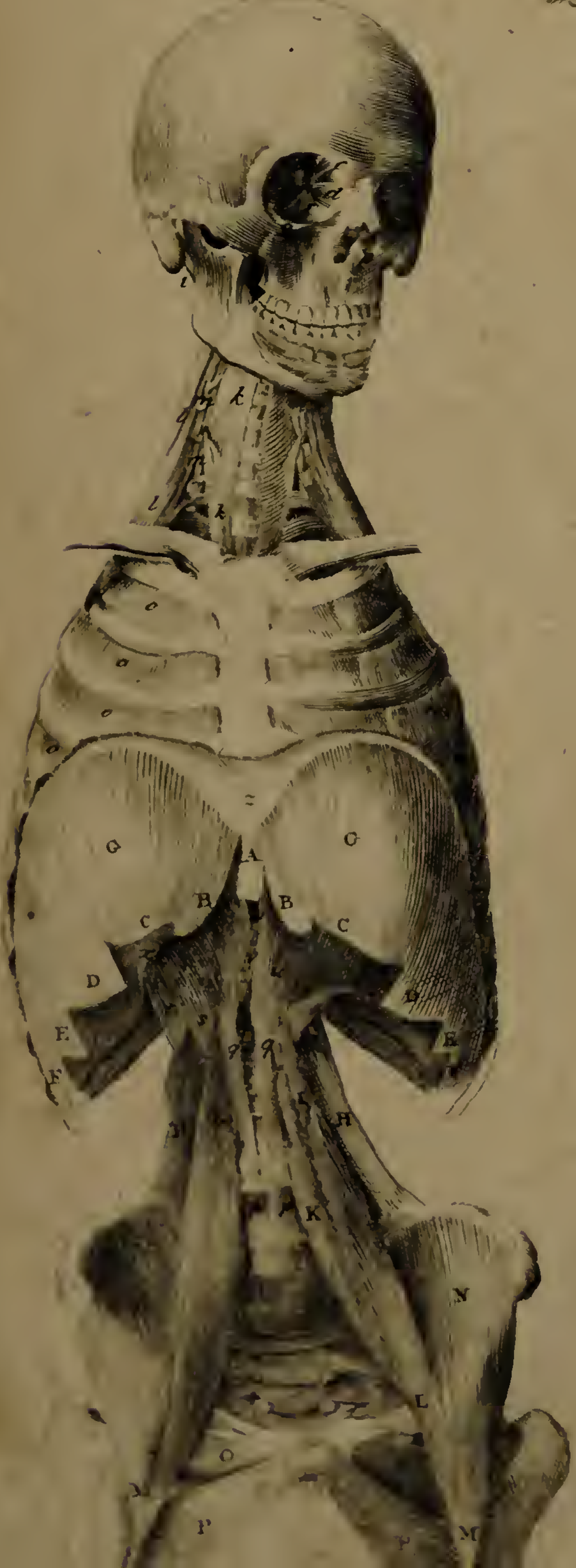


FIG. 10.

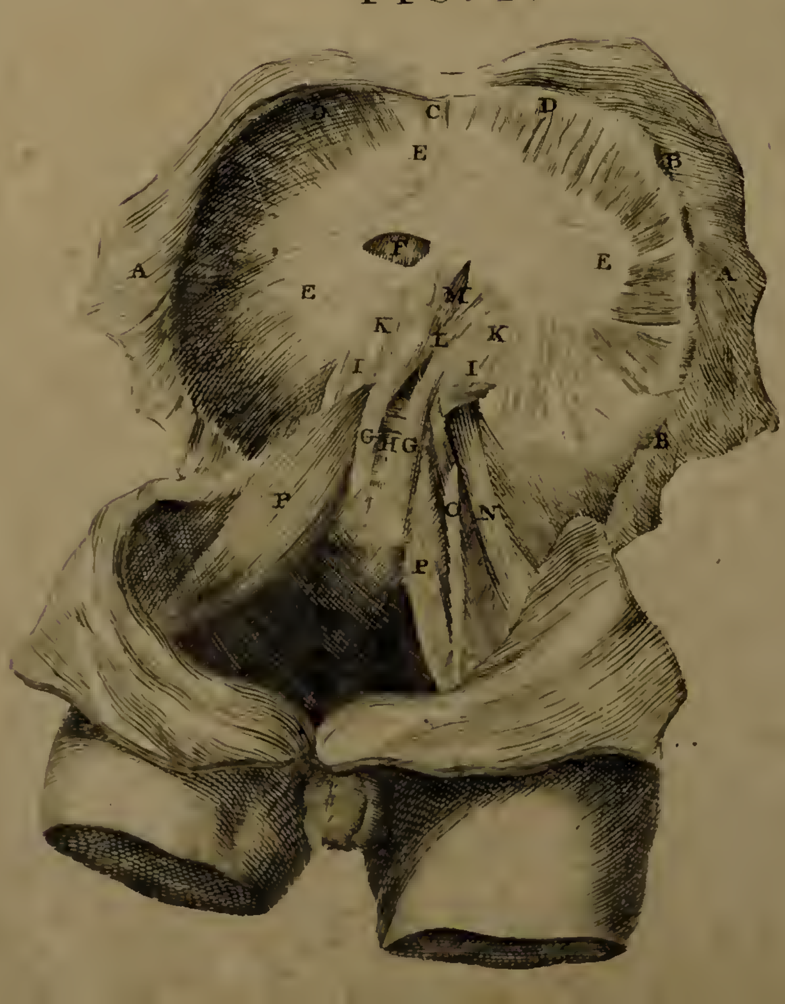


TABLE VII.

Represents the Salivary Glands, Parts about the Throat, and certain Deep-ſeated Muscles, in the Interior Part of the Body, not ſhewn in the former Figures.

FIG. 1. From the Life.

Part of the Muscles of the Os Hyoides, and Submaxillary Gland.

a, Part of the maſſeter muſcle.—*b*, Poſterior head of the digaſtric muſcle;—*c*, Its anterior head.—*d*, Stylo-hyoideus, through which the tendon of the digaſtric paſſes.—*e*, Sterno-hyoideus.—*f*, Omo-hyoideus.—*g*, The pharynx.—*h*, Submaxillary gland.

FIG. 2. From the Life.

Muscles deeper ſeated than the former, and the Submaxillary Gland raiſed.

a, *a*, Mylo-hyoidei.—*b*, Hyo-gloſſus.—*c*, Sterno-thyroideus.—*d*, Hyo-thyroideus.—*e*, The ſubmaxillary gland raiſed from its place, behind the angle of the lower jaw.—*f*, Stylo-gloſſus.—*g*, Stylo-pharyngeus.—*h*, The pharynx.

FIG. 3. From the Life.

Muscles deeper ſeated than the former.

a, Genio-hyoideus.—*b*, Genio-hyogloſſus.—*c*, Stylo-gloſſus.—*d*, Stylo-pharyngeus.—*e*, The ſubmaxillary gland raiſed, by which its duct is ſeen in its paſſage under the tongue, to its termination at the ſide of the frænum linguæ.—*f*, The ſublingual gland.—*g*, The os hyoides,—*h*, The thyroid cartilage.—*i*, The cricoid cartilage, with the crico-thyroid muſcles.—*k*, The thyroid gland.—*l*, The trachea.—*m*, The pharynx.

FIG. 4. From Cowper.

The Inferior Surface of the Tongue, with its Muscles Diſſected.

a, *a*, Genio-hyo-gloſſus.—*b*, Its origin cut from the inner part of the lower jaw.—*c*, *c*, *c*, Hyo-gloſſus.—*d*, Stylo-gloſſus.—*e*, The tip of the tongue pinned out, at each ſide of which its papillæ appear.—*f*, *f*, The baſis or root of the tongue.—*g*, The membrane, with its ſalivary miliary glands, continued from the tongue to the epiglottis.

FIG. 5. From Cowper; with Additions from Nature.

Shews the Tongue, Os Hyoides, and Larynx, ſeparated from the Left Side of the Head, and turned over upon the Right;—the Head being inverted.

a, The inner ſide of the lower jaw.—*b*, Part of the glandulæ palatinæ.—*c*, The uvula with its muſcle, hanging over the openings into the back-part of the noſe.—*d*, The right ſide of the pharynx remaining entire.—*e*, The tongue, at the anterior edges of which ſome of its papillæ are ſeen.—*f*, The ſalivary glands of the tongue.—*g*, One of the amygdalæ.—*h*, The os hyoides, with its left cornu joined to the left ſuperior cornu of the thyroid cartilage.—*i*, The thyroid cartilage.—*k*, The back-part of the cricoid cartilage.—*l*, *l*, The arytenoid cartilages.—*m*, The epiglottis.—*n*, The cartilages of the trachea.—*o*, The membranous part of the trachea.

FIG. 6. From Cowper.

The Back Part of the Pharynx, and its Connections with the Larynx.

A, Cartilages of the trachea.—B, The membranous back-part of the trachea.—C, C, That part of the pharynx which ariſes from the pterygoid proceſſes, levatores palati, and os occipitis.—D, D, Parts of the pharynx which ariſe from the lower jaw.—E, E, Fibres of the pharynx from the root of the tongue;—F, From the os hyoides;—G, From the thyroid cartilage; and—H, From the cricoid cartilage.—I, Os hyoides.—K, The thyroid cartilage.—L, L, The ſtyloid proceſſes.—M, M, Ligaments from the ſtyloid proceſſes, fixed to the appendices of the os hyoides.—N, N, Stylo-hyoidei.—O, O, Stylo-pharyngei.—P, Back-part of the œſophagus.—Q, Q, External ſurface of the œſophagus.—R, Sterno-thyroideus.—S, Hyo-thyroideus.

FIG. 7. From Cowper.

View of the Right and Back Part of the Larynx.

a, The cricoid cartilage.—*b*, The epiglottis;—*c*, Its root cut from the baſe of the tongue, where many ſmall glands appear.—*d*, The tips of the arytenoid cartilages freed from their membrane.—*e*, The concave ſurface of the thyroid cartilage, and its ſuperior cornua; the right half of the cartilage is turned back.—*f*, The inferior cornu of the thyroid cartilage, cut from—*g*, Its connection to the cricoid.—*h*, The crico-arytenoideus poſticus.—*i*, Crico-arytenoideus lateralis.—*k*, Thyro-arytenoideus.—*l*, Arytenoideus.—*m*, The trachea;—*n*, Its membranous part.

FIG. 8. From Eustachius.

A View, principally, of the Muscles in the Interior Part of the Body, next the Spine.

A, Rectus capitis lateralis.—B, Rectus capitis internus minor.—C, Rectus capitis internus major.—D, E, Longus colli.—F, Scalenus anticus.—G, Scalenus medius.—H, Trachelo-maſtoideus.—I, Intercoſtales externi.—K, Intercoſtales interni.—L, Portions of the internal intercoſtals, called Depreſſores Proprii Cowperii.—M, Tranſverſus abdominis.—N, Quadratus lumborum.—O, Pſoas parvus.—P, Pſoas magnus. Q, A portion of the pſoas magnus; the upper part which lay over the quadratus lumborum is cut off.—R, Iliacus internus.—S, Pyriformis.—T, Obturator externus.—U, Adductor brevis femoris.

FIG. 9. From Albinus.

A View of the Fourth Order of Muscles on the Head & Neck.

Muscles on the Head and Neck.—*a*, Levator palpebræ.—*b*, Rectus attollens.—*c*, Obliquus ſuperior, or trochlearis.—*d*, Rectus adducens.—*e*, Rectus abducens.—*f*, Rectus deprimens.—*g*, Obliquus inferior.—*h*, Pterygoideus internus.—*i*, Obliquus ſuperior capitis.—*k*, *k*, Longus colli.—*l*, *l*, Scalenus medius.—*m*, *m*, Intertranſverſales colli priores.

On the Trunk.—*n*, *n*, &c. Intercoſtales externi.—*o*, *o*, &c. Intercoſtales interni.—*pq*, *pq*, The firſt heads, or crura of the inferior muſcle of the diaphragm, between which the aorta paſſes at *r*.—*s*, The fourth head; the ſecond and third heads of the inferior muſcle of the diaphragm are ſituated between the upper ends of its crura and the pſoæ muſcles, but are not here repreſented.—*t*, Another head ſometimes found; connected with the quadratus lumborum.—*u*, *u*, The fleſhy part formed by the joining of theſe heads.—*v*, Fibres croſſing under—*w*, The paſſage for the œſophagus.—*x*, The middle tendon, on the right ſide, with its fibres decuſſating.—*y*, Part where the diaphragm is fixed to the twelfth rib.—*z*, The anterior part of the middle tendon.—A, Part where the diaphragm is fixed to the cartilago enſiformis;—B, to the peritoneum; and—C, C, D, D, E, E, F, F, to the 7th, 8th, 9th, 10th, and 11th ribs.—G, G, The convex part of the diaphragm towards the thorax.—H, H, Quadratus lumborum.—I, Pſoas parvus.—K, L, M, Pſoas magnus.—N, Iliacus internus.—O, Obturator externus.—P, Part of the adductor femoris.

FIG. 10. From the Life.

The Abdomen opened, and its contents removed, to ſhew the Diaphragm and Muscles of the Loins.

A, A, The containing parts of the abdomen cut and turned back.—B, B, The cut ends of the ribs.—C, The origin of the ſuperior or greater muſcle of the diaphragm from the cartilago enſiformis.—D, D, That from the ribs.—E, E, E, The cordiform tendon of the diaphragm.—F, Perforation in that tendon for the paſſage of the vena cava inferior.—G, G, The long crura of the inferior or leſſer muſcle of the diaphragm.—H, The paſſage of the aorta between the long crura.—I, I, Shorter heads.—K, K, The fleſhy columns from the joining of theſe heads.—L, Fibres croſſing under—M, The paſſage of the œſophagus.—N, Quadratus lumborum.—O, Pſoas parvus.—P, P, The large pſoæ, the right of which is turned outward at its lower end.

FIG. 1.

FIG. 2.

FIG. 18.

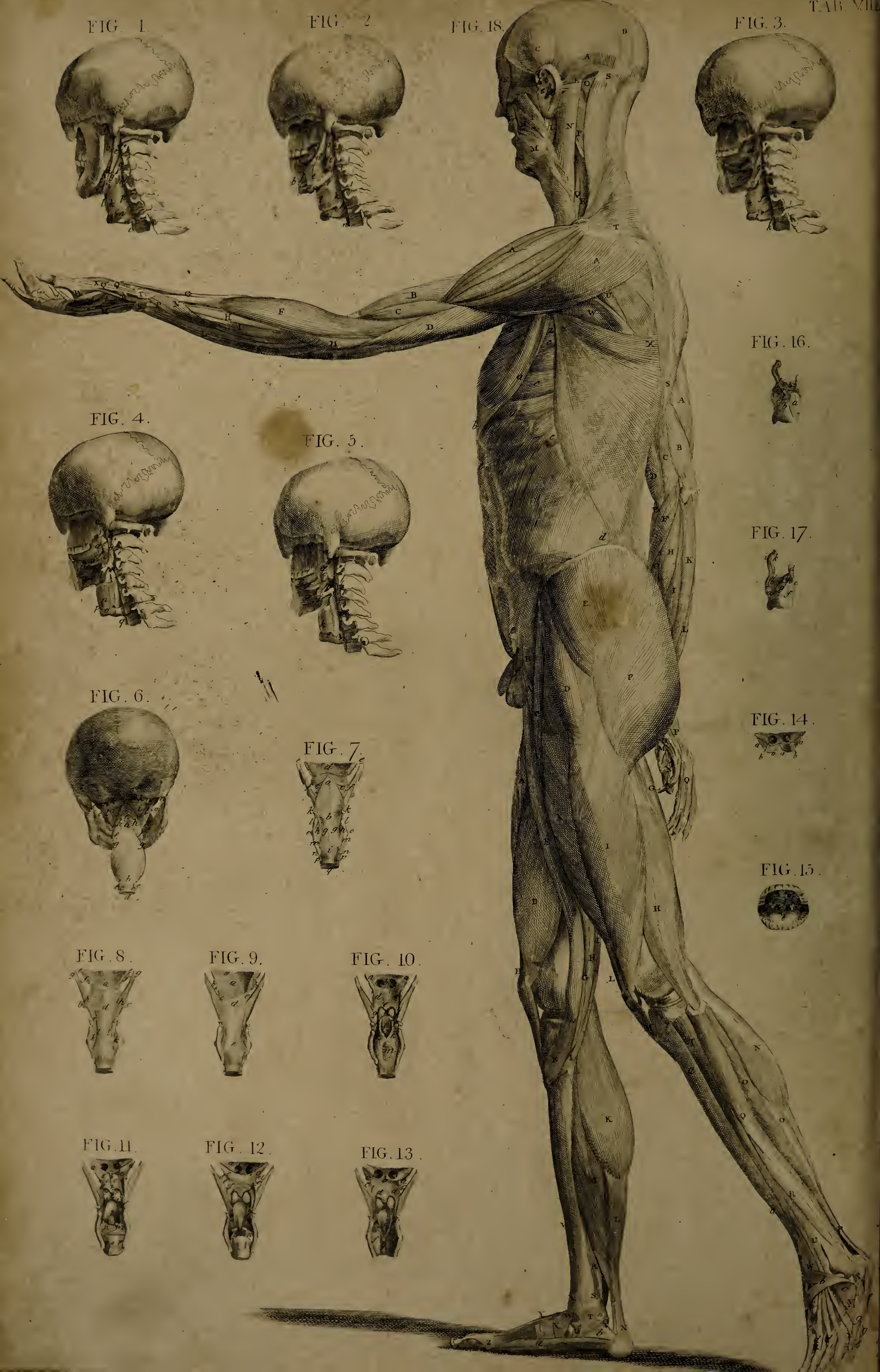


FIG. 3.

FIG. 16.

FIG. 4.

FIG. 5.

FIG. 17.

FIG. 6.

FIG. 7.

FIG. 14.

FIG. 15.

FIG. 8.

FIG. 9.

FIG. 10.

FIG. 11.

FIG. 12.

FIG. 13.

TABLE VIII.

THE MUSCLES ſeated about the THROAT; with a View of the FIRST LAYER of MUSCLES upon the LATERAL PARTS of the BODY.

All the Figures are copied from ALBINUS, *but, as well as the other Figures in this Work taken from that Author, they are upon a ſomewhat ſmaller Scale.*

FIG. 1.

REPRESENTS the MUSCLES ſeated under the HEAD, and before the VERTEBRÆ of the NECK.

a, Pterygoideus externus.—*b*, Pterygoideus internus.—*c*, Mylo-hyoideus.—*d*, Stylo-hyoideus.—*e*, Digaſtricus.—*f*, Anterior belly of the digaſtric muſcle.—*g*, *h*, Hyo-gloſſus.—*i*, Os hyoides.—*k*, Thyreo-hyoideus.—*l*, Thyroid cartilage.—*m*, Crico-thyroideus.—*n*, Cricoid cartilage.—*o*, Section of the œſophagus.—*p*, Conſtrictor pharyngis inferior.—*q*, Conſtrictor pharyngis medius.—*r*, Conſtrictor pharyngis ſuperior.

FIG. 2.

The OUTER MUSCLES of the former Figure, and half of the LOWER JAW removed, to ſhew the MUSCLES and other Parts deeper ſeated.

a, The upper jaw.—*b*, A ſection of the lower jaw.—*c*, The tongue.—*d*, Stylo-gloſſus.—*e*, Hyo-gloſſus.—*f*, Genio-hyo-gloſſus.—*g*, Stylo-pharyngeus.—*h*, Conſtrictor pharyngis ſuperior.—*i*, Conſtrictor pharyngis medius.—*k*, Conſtrictor pharyngis inferior.—*l*, Thyroid cartilage.—*m*, Cricoid cartilage.—*n*, Section of the œſophagus.

FIG. 3.

VIEW of the MUSCLES deeper ſeated than thoſe repreſented in the preceding Figure.

a, Stylo-gloſſus.—*b*, Lingualis.—*c*, Genio-gloſſus.—*d*, Conſtrictor pharyngis ſuperior.—*e*, Conſtrictor pharyngis medius.—*f*, Conſtrictor pharyngis inferior.—*g*, Os hyoides.—*h*, Thyroid cartilage.—*i*, Cricoid cartilage.—*k*, Section of the œſophagus.

FIG. 4.

Repreſents the NEXT ORDER of MUSCLES, after the outermoſt of the third Figure are removed.

a, The circumflexus palati. Immediately behind it, is the levator palati.—*b*, The ſtylo-pharyngeus.—*c*, *c*, The membrane of the pharynx naked.—*d*, The conſtrictor iſthmi faucium.—*e*, The tonſil.—*f*, The ſtylo-gloſſus, where it joins the tongue.—*g*, Section of the hyo-gloſſus.—*h*, Lingualis.—*i*, *k*, Genio-hyo-gloſſus.---*i*, Its origin from the lower jaw.—*l*, The os hyoides.—*m*, The ligament which joins the cornu of the os hyoides, and thyroid cartilage.—*n*, The body of the thyroid cartilage.—*o*, The cricoid cartilage.—*p*, The ligament by which the thyroid and cricoid cartilage are joined together.—*q*, Section of the œſophagus.

FIG. 5.

In this Figure ſome of the OUTER MUSCLES, ſhown in the Fourth, are removed;—the PHARYNX laid open longitudinally, and the Left Part of it cut off, to ſhew its Cavity, with the MOVEABLE PALATE, ROOT of the TONGUE, and EPIGLOTTIS.

a, The circumflexus palati.—*b*, The levator palati.—*c*, The tonſil.—*d*, Conſtrictor iſthmi faucium.—*e*, The tongue.—*f*, Lingualis.—*g*, Genio-hyo-gloſſus.—*h*, Epiglottis.—*i*, Os hyoides.—*k*, Thyroid cartilage.—*l*, Cricoid cartilage.—*m*, The pharynx laid open.—*n*, The beginning of the œſophagus.

FIG. 6.

Repreſents a Poſterior View of the PHARYNX, and the Under Part of the CRANIUM to which it is fixed.

a, The upper end of the lower conſtrictors of the pharynx.—*b*, The under end of the pharynx;—the letter points alſo at the inner tranſverſe fibres of the œſophagus, which are laid bare.—*c*, *c*, The outer fibres of the œſophagus, deſcending obliquely backwards on each ſide.—*d*, Section of the œſophagus.—*e*, *e*, Section of the trachea.—*f*, *f*, The ends of the cornua of the os hyoides.—*g*, *g*, The ligaments which join the upper proceſſes of the thyroid cartilage, to the ends of the cornua of the os hyoides.—*h*, *h*, The middle conſtrictors of the pharynx.—*i*, *i*, The upper conſtrictors of the pharynx.—*k*, *k*, The naked membrane of the pharynx.—*l*, *l*, The ſtylo-pharyngei muſcles.—*m*, *m*, The ſtyloid proceſſes of the temporal bones.—*n*, *n*, The Pterygoid proceſſes of the ſphenoid bone.—*o*, *o*, The backmoſt tooth of the upper and under jaw.

FIG. 7.

Preſents the next View, after the removal of the lower Conſtrictor of the Pharynx. The Bones of the Head are not added, but the Styloid Proceſſes are left, to ſhew the Origin of the Stylo-pharyngei.

a, The upper point of the middle conſtrictors of the pharynx.—*b*, Their under point.—*c*, *c*, The upper conſtrictors of the pharynx, cut off from the buccinator.—*d*, The naked membrane of the pharynx.—*e*, *e*, The ſtyloid proceſſes of the temporal bones, cut off at their roots.—*f*, *f*, The ſtylo-pharyngei, ariſing tendinous from the ſtyloid proceſs.—*g*, *g*, The common ends of the ſtylo-pharyngei and palato-pharyngei muſcles, joined to each other on the back of the pharynx.—*h*, *h*, Part of theſe ſame muſcles fixed to the edges of the thyroid cartilage.—*i*, The naked membrane of the lower part of the pharynx, continued to the œſophagus.—*k*, *k*, The cornua of the os hyoides.—*l*, *l*, The ſuperior cornua of the thyroid cartilage.—*m*, *m*, The poſterior edges of the thyroid cartilage.—*n*, *n*, Its inferior cornua.—*o*, *o*, The tubercles on the outer ſides, at the roots of the ſuperior cornua.—*p*, *p*, The annular cartilage.—*q*, Section of the trachea.

FIG. 8.

The next View of the MUSCLES, after the middle Conſtrictors of the Pharynx are removed.

a, *b*, *c*, *d*, The upper conſtrictors of the pharynx.—*e*, *e*, The levatores palati.—*f*, *f*, Circumflex muſcles of the palate.—*g*, *g*, The tendinous origin of the ſtylo-pharyngei, where they are cut off from the ſtyloid proceſſes.—*h*, *h*, That part of the ſtylo-pharyngei which forms two faſciculi, which paſs ſeparately under the fibres of the upper conſtrictor.—*i*, *i*, The under and larger part.—*k*, *k*, Parts of the common ends of the ſtylo-pharyngei and palato-pharyngei, fixed to the thyroid cartilage.—*l*, *l*, Parts of their common ends, joined together on the back of the pharynx.

FIG. 9.

Repreſents the next Order of MUSCLES, after the Upper Conſtrictor of the Pharynx is removed.

a, The naked membrane of the pharynx.—*b*, *b*, The ſmall hooks of the pterygoid proceſſes.—*c*, *c*, Palato-pharyngei.—*d*, *e*, Parts of the common ends of the ſtylo-pharyngei and palato-pharyngei, the fibres of which converge.—From *e*, outwards, they vaniſh in the back part of the membrane of the pharynx.

FIG. 10.

Repreſents the Inner and Fore-part of the PHARYNX, or the back-part of the LARYNX,—the whole of the poſterior part of the Pharynx and Œſophagus being removed.

a, *a*, The Euſtachian tubes, their orifices opening laterally into the poſterior foramina of the noſtrils.—*b*, The ſeptum narium.—*c*, *c*, The cavity of the noſtrils, with the lower oſſa ſpongioſa, covered with the mucous membrane.—*d*, *d*, The palatum molle.—*e*, The uvula.—*f*, *f*, The poſterior arches which deſcend laterally from the ſoft palate through the ſides of the pharynx.—*g*, *g*, The tonſils.—*h*, The tongue.—*i*, The epiglottis.—*k*, *k*, The membranous ſides of the glottis.—*l*, The rima, or ſlit of the glottis.—*m*, The back-part of the tube of the larynx, projecting within the pharynx.

FIG.

TABLE VIII. CONTINUED.

FIG. 11.

Repreſents the Muscles lying immediately under the Membrane which covers the Parts expreſſed in the former Figure; the Membrane itſelf with the Œſophagus and Trachea being removed.

a, a, The levatores palati.—*b,* The azygos uvulæ.—*c, c,* Palato-pharyngei.—*d,* The part which afterwards paſſes under the levator palati.—*e, e,* The parts of the palato pharyngei, called by Albinus The *Salpingo-Pharyngei,* joining with the palato-pharyngei.—*f, f,* Parts of the common ends of the palato pharyngei, ſalpingo-pharyngei, and ſtylo-pharyngei.—*g, g,* Poſterior edge of the velum palati.—*h,* The uvula.—*i, i,* The tonſils which are protuberant before the palato-pharyngei muſcles.—*k,* The tongue.—*l,* The epiglottis.—*m, m,* The points of the arytenoid cartilages.—*n, n,* The oblique arytenoid muſcles.—*o, o,* The arytenoideus tranſverſus.—*p, p,* The crico-arytenoidei poſtici, ariſing from—*q,* The cricoid cartilage.

FIG. 12.

Muscles deeper ſeated than thoſe ſhewn in the former Figure.

a, a, The Euſtachian tubes opening laterally into the poſterior foramina of the noſtrils.—*b, b,* Oſſa ſpongioſa ſuperiora, covered with the mucous membrane.—*c, c,* The levatores palati.—*d, d,* The circumflexi palati.—*e, e,* The ſmall hooks of the pterygoid proceſſes.—*f, f,* Parts of the palato-pharyngei which paſs through the ſoft palate, under the ends of the levatores.—*g, g,* Parts of the common ends of the ſtylo-pharyngei and palato-pharyngei, produced from the ſtylo-pharyngei.—*h, h,* The arytenoid cartilages.

FIG. 13.

Repreſents the Muscles which appear upon the removal of the Levatores Palati, the Annular and Arytenoid Cartilages, and their Appendages.

a, a, The circumflexi palati.—*b,* The aponeuroſis of the circumflex muſcles.—*c, c,* The hook-like proceſſes of the pterygoid plates.—*d, d,* Parts of the palato-pharyngei, which paſs through the ſoft palate under the ends of the levatores.—*e, e,* Part of the ſtylo-pharyngei inſerted into the thyroid cartilage.—*f, f,* The thyroid cartilage.—*g,* Prominence upon the inner ſide of the thyroid cartilage.—*h,* The under end of the epiglottis, fixed to the thyroid cartilage.

FIG. 14.

Follows after the Upper Part of the preceding Figure.

a a, a a, The circumflexi palati.—*b, b,* The hooks of the pterygoid proceſſes.

FIG. 15.

The Muscles of the Fauces, ſeen when the Jaws are widely opened.

a, a, The poſterior arches of the palate.—*b, b,* The anterior arches. Between *a,* and *b,* is the ſeat of the amygdalæ.—*c, c,* The edge of the ſoft palate.—*d,* The uvula.—*e,* The tongue.—*f, f,* The fauces.—*g, g,* Conſtrictores iſthmi faucium.—*h, h,* Palato-pharyngei.

FIG. 16.

A Lateral View of the Larynx, with the Muscles which lie under the Thyroid Cartilage, the right ſide of which is removed.

a, Crico-arytenoideus poſticus.—*b,* Crico-arytenoideus lateralis.—*c, e, f,* Thyreo-epiglottideus.—*d, g,* Thyreo-arytenoidei.—*h,* Arytenoideus tranſverſus.—*i,* Arytenoideus obliquus, with its continuation to the epiglottis.

FIG. 17.

The ſame View with the preceding, of the Cartilages of the Larynx, but freed from the Muſcles and Membranes.

a, b, c, d, The inſide of the left half of the thyroid cartilage;—*d,* The ſuperior cornu.—*f,* The cricoid cartilage.—*g,* The right, and—*h,* The left arytenoid cartilage.—*i, k,* The epiglottis;—*k,* Its concave part.

FIG. 18.

A Side-view of the First Layer of Muscles.

Head and Trunk.—A, Occipito-frontalis.—B, The aponeuroſis joining the two ſides of this muſcle.—C, Attollens aurem.—D, Anterior auris.—E, Retrahentes auris.—*a,* Helicis major.—*b,* Helicis minor.—*c,* Tragicus.—*d,* Antitragicus.—F, Orbicularis palpebrarum.—G, Zygomaticus major.—H, Buccinator.—I, Maſſeter.—K, Depreſſor anguli oris.—L, Pterygoideus internus.—M, M, Platyſma myoides.—N, Sterno-cleido-maſtoideus.—O, Complexus.—P, Splenius.—Q, Scalenus medius.—R, Levator ſcapulæ.—S, S, T, Cucullaris.—U, Teres minor.—W, Teres major.—X, X, Y, Latiſſimus dorſi.—Z, Pectoralis minor.—*a, a, b,* Pectoralis major.—*c, c, c,* Serratus anticus major.—*d, d, e, e,* Obliquus externus abdominis; *d, d,* The fleſhy,—*e, e,* The tendinous parts.—*f,* The cremaſter muſcle.

Left Superior Extremity.—A, A, Deltoides.—B, Biceps flexor cubiti.—C, Brachialis internus.—D, Triceps extenſor cubiti.—E, Flexor carpi ulnaris.—F, Supinator radii longus.—G, Flexor carpi radialis.—H, H, Extenſor carpi radialis longior.—I, Extenſor carpi radialis brevior.—K, Extenſor carpi ulnaris.—L, Extenſor digitorum communis;—M, Its tendons.—N, Extenſor oſſis metacarpi pollicis;—O, Its tendon.—P, Extenſor primi internodii pollicis;—Q, Its tendon.—R, Tendo ſecundi internodii.—S, Ligamentum carpi annulare poſterius.—T, Ligament confining the tendons of the extenſor oſſis metacarpi, and extenſor primi internodii pollicis.—W, Adductor pollicis.

Right Superior Extremity.—A, B, Triceps extenſor cubiti; A, The part called Extenſor Longus; B, The part called Extenſor Brevis.—C, Brachialis internus.—D, Biceps flexor cubiti.—E, Supinator longus.—F, Pronator teres.—G, Flexor carpi radialis.—H, Palmaris longus.—I, Flexor ſublimis perforatus.—K, Flexor carpi ulnaris.—L, Entenſor carpi ulnaris.—M, Flexor brevis pollicis.—N, The tendon of the long flexor, with its retaining ligaments.—O, ~~Pronator radii quadratus~~ Palmaris brevis, and on the outſide of it, the abductor minimi digiti.—P, The tendons of the extenſor digitorum communis.—Q, The aponeuroſes of theſe tendons, ſtretched over the backs of the four fingers.

Left Inferior Extremity.—A, Adductor longus femoris.—B, Pectineus and pſoas magnus.—C, Sartorius.—D, Tenſor vaginæ femoris.—E, Gluteus medius.—F, Gluteus maximus.—G, Semitendinoſus.—H, Biceps flexor cruris.—I, Vaſtus externus.—K, Rectus.—L, Vaſtus internus.—M, Ligament connecting the patella to the tibia.—N, Outer head of the gemellus.—O, O, Soleus.—P, Tendo Achillis.—Q, Peroneus longus.—R, Peroneus brevis.—S, Ligaments binding the tendons of the peronei muſcles—T, Extenſor longus digitorum, inſeparably connected with—U, the peroneus tertius;—V, Its tendon inſerted into the metatarſal bone of the little toe.—W, The tendon of the extenſor longus, ſplitting into four ſmaller tendons;—X, X, Their inſertions into the toes.—Y, Extenſor proprius pollicis;—Z, Its tendon.—*a, a,* Tibialis anticus.—*b,* Upper and under portions of the ligamentum tarſi annulare.—*c,* Extenſor brevis digitorum pedis; its tendons are inſerted into all the toes, excepting the ſmalleſt.—*d, d,* Part of the interoſſei pedis externi.—*e,* Abductor minimi digiti pedis;—*f,* Its tendon.—*g, g,* Flexor brevis minimi digiti pedis.

Right Inferior Extremity.—A, The rectus;—B, Its inſertion into the patella.—C, The ligament which fixes the patella to the tibia.—D, Vaſtus internus.—E, Sartorius;—F, Its tendon fixed to the tibia.—G, Gracilis.—H, Semimembranoſus.—I, I, Semitendinoſus.—K, Gemellus;—L, Its tendon.—M, Soleus.—N, Tendo Achillis.—O, Tendon of the plantaris.—P, Flexor longus pollicis pedis.—Q, Ligament binding the tendon of the flexor longus.—R, flexor longus digitorum pedis.—S, Tendon of the tibialis poſticus.—T, Ligament covering the tendon of the flexor longus digitorum pedis, and tibialis poſticus.—U, Ligament which retains the tibialis poſticus.—V, Tibialis anticus;—W, Its tendon.—X, X, The upper and under portions of the ligamentum tarſi annulare.—Y, Tendon of the extenſor proprius pollicis pedis.—Z, An aponeuroſis joining this tendon.—*a,* Abductor pollicis pedis.—*b,* Maſſa carnea Jacobi Sylvii.

TAB. IX.

FIG. 1.

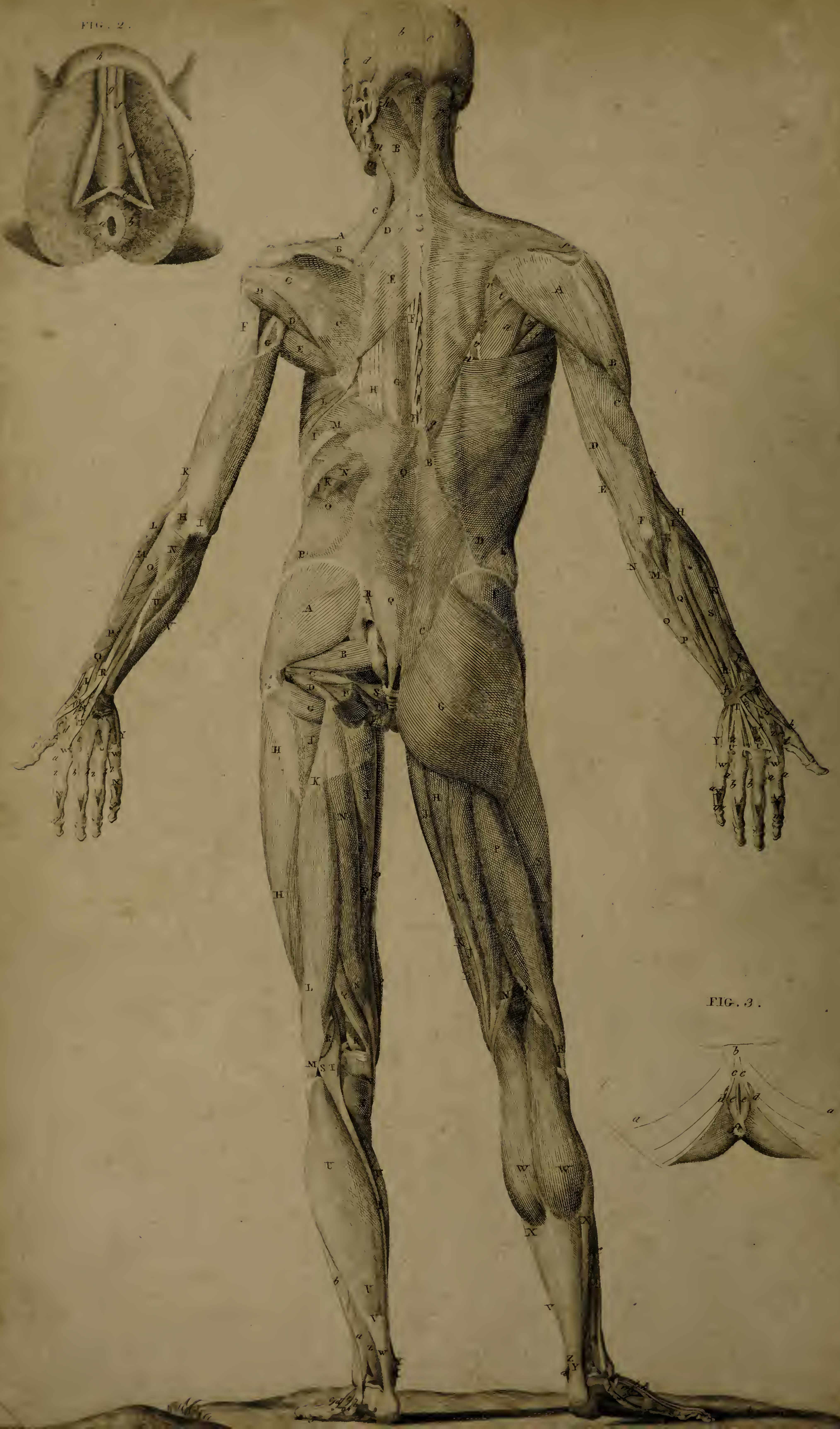


FIG. 2.

FIG. 3.

TABLE IX.

Represents the Firſt and Second Layers of Muscles on the Poſterior Part of the Body, and the Muscles of the External Parts of Generation.

FIG. I. From Albinus.

On the Left Side of the Head, and Right Side of the Poſterior Part of the Trunk and Extremities, the Muscles immediately under the common Integuments are ſhewn; on the Left Side of the Poſterior Part of the Trunk and Extremities, are ſeen the Muscles which come in view when the exterior ſet has been removed.

Head.—*a b*, *a b*, Occipito-frontalis.—*a*, *a*, The fleſhy,—*b*, *b*, The tendinous parts.—*c*, A membrane joining them.—*d*, Attollens aurem.—*e*, Part of the occipito-frontalis.—*f*, Orbicularis palpebrarum.—*g*, Anterior auris,—*h*, Retrahentes auris.—*i*, Maſſeter.—*k*, Zygomaticus major.—*l*, Pterygoideus internus.—*m*, Platyſma myoides.—*n*, Mylo-hyoideus.

Right Side; Neck and Trunk.—*o*, Sterno-cleido-maſtoideus.—*p*, *q*, *r*, *s*, Trapezius, ſeu cucullaris.—*t*, *u*, Infra-ſpinatus.—*v*, Part of the rhomboides.—*w*, Part of the ſacro-lumbalis.—*x*, Part of the teres minor.—*y*, Teres major.—A, B, C, D, Latiſſimus dorſi.—E, Fleſhy part of the obliquus externus deſcendens.

Inferior Extremity.—F, Part of the Gluteus medius.—G, Gluteus maximus.—H, Part of the adductor magnus femoris.—I, J, Gracilis.—K, Part of the ſartorius.—L, Part of the vaſtus internus.—M, N, Semimembranoſus;—N, Its tendon.—O, Semitendinoſus.—P, Q, R, Biceps flexor cruris;—P, Its long head;—Q, Its ſhort head;—R, The tendon common to the two heads.—S, Vaſtus externus.—T, V, Plantaris;—V, Its tendon.—W, W, Gaſtrocnemius, ſeu gemellus.—X, X, Soleus.—Y, Tendo Achillis.—Z, Tendon of the tibialis poſticus.—*a*, Ligaments at the malleolus internus.—*b*, Flexor longus pollicis.—*c*, *d*, Peroneus brevis.—*e*, *f*, Peroneus longus.—*g*, *h*, *i*, The ligaments which tie the tendons at the outer ankle.—*k*, The tendons of the extenſor longus digitorum pedis.—*l*, Tendon of the peroneus tertius.—*m*, Extenſor brevis digitorum pedis.—*n*, *o*, Abductor minimi digiti pedis.—*p*, Flexor brevis minimi digiti pedis.

Superior Extremity.—A, B, Deltoides.—C, D, E, F, Triceps extenſor cubiti;—C, Its ſhort head;—D, Its long head;—E, Its third head, called Brachialis Externus;—F, The tendon common to the three heads.—G, Brachialis internus.—H, Supinator radii longus.—I, Extenſor carpi radialis longior.—K, Extenſor carpi radialis brevior.—L, Part of the anconeus.—M, Part of the flexor profundus, which comes from the ulna.—N, Part of the palmaris longus.—O, Part of the flexor ſublimis.—P, Flexor carpi ulnaris.—Q, Extenſor carpi ulnaris.—R, Tendons of the extenſor digitorum communis, belonging to the little finger.—S, Extenſor digitorum communis.—T, Tendons of the extenſor digitorum communis, going to the other fingers;—U, U, Their joinings by croſs tendons.—V, The tendon of the indicator, going to join with the tendon of the extenſor.—W, W, The tendons of the extenſor communis, joined with thoſe of the lumbricales and interoſſei.—X, X, Extremities of theſe tendons, joined to the bones of the ſecond phalanx.—Y, Abductor minimi digiti manus.—Z, Z, Z, Interoſſei externi.—*a*, *a*, Tendons of the anterior interoſſei, joining with the lumbricales.—*b*, *b*, *b*, Tendons of the poſterior interoſſei.—*c*, Abductor indicis.—*d*, Tendon of the extenſor ſecundi internodii pollicis.—*e*, Capſular ligament of the wriſt.—*f*, Ligament of the extenſor carpi ulnaris.—*g*, A ligament for the extenſores oſſis metacarpi, et primi internodii pollicis.—*h*, Extenſor primi internodii pollicis.—*i*, Extenſor oſſis metacarpi pollicis.—*k*, Tendons of the three extenſors of the thumb.—*l*, Adductor pollicis.—*m*, *m*, Tendons of the interoſſei and lumbricales, after joining with the tendons of the extenſor digitorum communis, and receiving additions from it, fixed to the third phalanx.

Left Side; Neck and Trunk.—A, The complexus.—B, The ſplenius capitis.—C, Levator ſcapulæ.—D, Rhomboides minor.—E, Rhomboides major.—F, F, Spinalis dorſi.—G, Longiſſimus dorſi.—H, Sacrolumbalis.—I, I, Part of the external intercoſtal muſcles.—K, The eleventh of the internal intercoſtals.—L, Part of the ſerratus anticus major.—M, N, Serratus poſticus inferior.—O, P, The back-part of the internal oblique muſcle of the abdomen.—Q, Q, The broad tendinous beginning of the latiſſimus dorſi.—R, Part of the multifidus ſpinæ.—S, Coccygeus.—T, Levator ani.—U, Tranſverſalis alteri perinei.—V, Tranſverſalis perinei.

Inferior Extremity.—A, Gluteus medius.—B, Pyriformis.—C, Geminus ſuperior.—D, Geminus inferior.—E, Part of the obturator externus.—F, Obturator internus.—G, Quadratus femoris.—H, H, Vaſtus externus.—I, I, Adductor magnus femoris.—K, L, M, Biceps cruris.—N, N, Semitendinoſus.—O, Gracilis.—P, Part of the vaſtus internus.—Q, Q, Q, Semimembranoſus.—R, R, The heads of the gemellus.—S, S, Popliteus.—T, T, Plantaris.—U, U, U, Soleus.—V, The cut tendon of the gemellus.—W, The tendo Achillis, fixed to the os calcis.—X, Tendon of the flexor longus digitorum pedis.—Y, Tendon of the tibialis poſticus.—Z, Flexor longus pollicis.—*a*, *a*, Peroneus brevis.—*b*, *b*, Peroneus longus.—*c*, Tendons of the long extenſors of the toes.—*d*, Tendon of the peroneus tertius.—*e*, Extenſor digitorum brevis.—*f*, Flexor brevis digitorum.—*g*, Flexor parvus minimi digiti pedis.

Superior Extremity.—A, Origin of the omo-hyoideus.—B, Supraſpinatus.—C, C, Infraſpinatus.—D, D, Teres minor.—E, Teres major.—F, G, H, I, Triceps extenſor cubiti.—F, The ſhort head.—G, The long head of the triceps.—H, Brachialis externus, or third head.—I, Tendon common to the three heads.—K, Brachialis internus.—L, L, Extenſor carpi radialis longior.—M, M, Extenſor carpi radialis brevior.—N, Anconeus.—O, Supinator radii brevis.—P, Extenſor oſſis metacarpi pollicis.—Q, Extenſor primi internodii pollicis.—R, Extenſor ſecundi internodii pollicis.—S, The conjoined tendons of the extenſors, fixed to the laſt bone of the thumb.—T, Indicator.—U, Flexor profundus perforans.—V, Flexor carpi ulnaris.—W, W, The tendons of the extenſor communis cut off where they are about to join with thoſe of the lumbricales and interoſſei.—X, X, The tendons of the extenſor communis fixed to the ſecond phalanx.—Y, Abductor digiti minimi.—Z, Z, Tendons of the anterior interoſſei, joining with thoſe of the lumbricales.—*a*, Tendon of the firſt lumbricalis.—*b*, *b*, *b*, Tendons of the poſterior interoſſei.—*c*, *c*, *c*, The interoſſei muſcles.—*d*, Prior indicis.—*e*, Abductor indicis.—*f*, Adductor pollicis.—*g*, *g*, The tendons of the interoſſei and lumbricales, after joining with the tendons of the extenſor communis, fixed to the third phalanx. Theſe tendons on the back of the fingers are tied down by ligaments, or rather aponeuroſes, the upper part of which comes from the articulation of the fingers with the metacarpus, the under part from the tendons of the interoſſei and lumbricales.

FIG. 2. From the Life.

Muscles about the Root of the Penis, and Under End of the Intestinum Rectum, of a Child.

a, The ſphincter ani.—*b*, Levator ani.—*c*, Tranſverſalis perinei.—*d*, Erector penis.—*e*, Accelerator urinæ.—*f*, Corpus cavernoſum penis.—*g*, Corpus cavernoſum urethræ.—*h*, The ſcrotum.—*i*, Part of the thigh.

FIG. 3. From Eustachius.

Muscles of the External Parts of Generation, &c. in the Female.

a, *a*, A ſection of the thighs.—*b*, The clitoris.—*c*, *c*, The crura clitoridis.—*d*, *d*, The erectores clitoridis.—*e*, *e*, The ſphincter vaginæ.—*f*, The ſphincter ani connected with the ſphincter vaginæ.

FIG. 1.

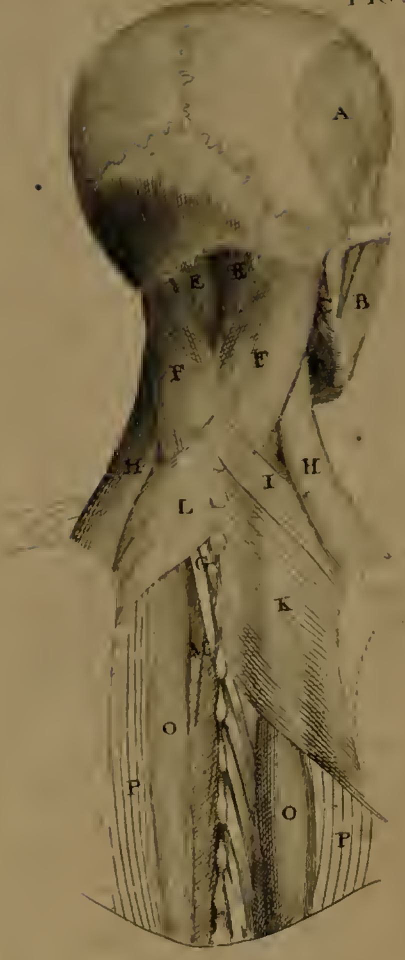


FIG. 2

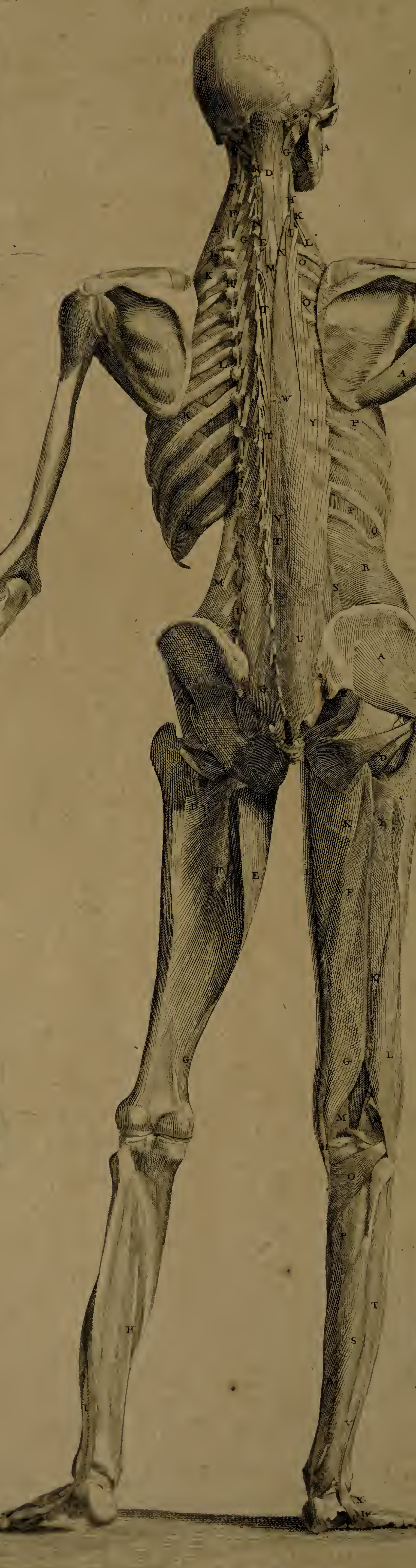


FIG. 3.

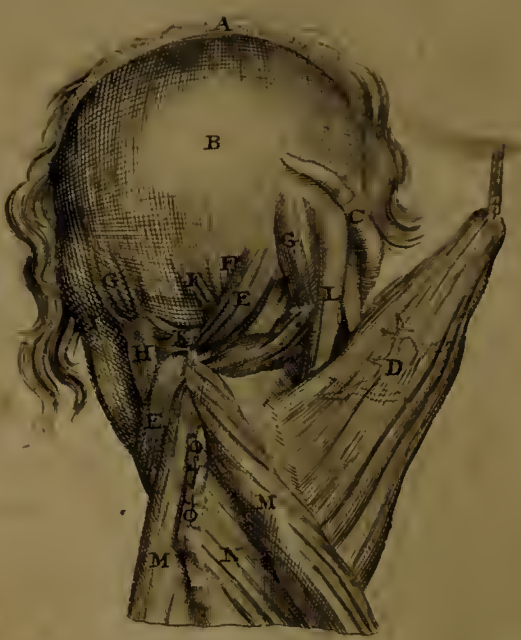


FIG. 4.

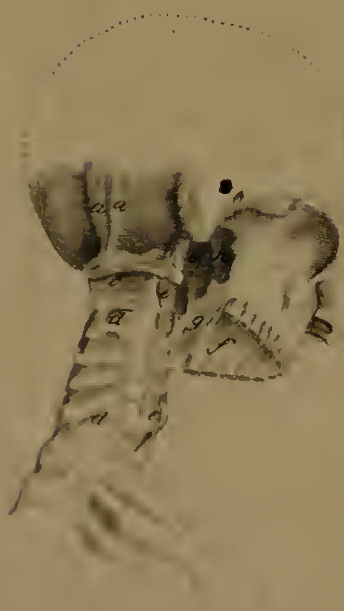


FIG. 5.

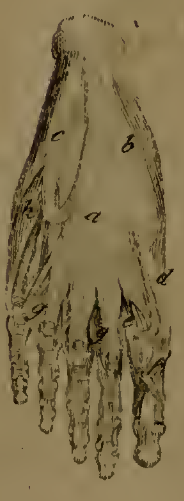


FIG. 6.

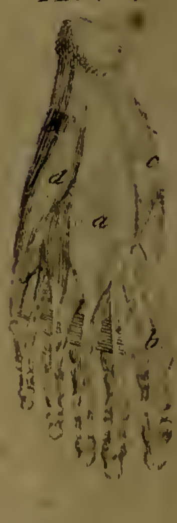


FIG. 7.

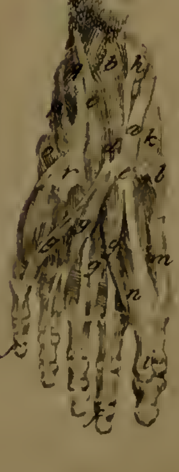


FIG. 8.

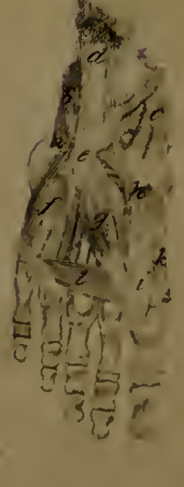


FIG. 9

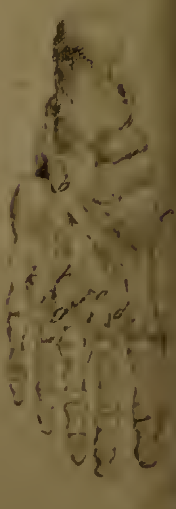


TABLE X.

Represents the Second Layer of Muscles upon the Head, Neck, and Upper Part of the Trunk;—the Third and Fourth Layers of Muscles on the Poſterior Part of the Body, with the Muscles on the Sole of the Foot.

The Figures of this Table are copied from Albinus, *excepting the Third and Fourth, which are taken from* Cowper.

FIG. 1.

Muscles upon the Head and Neck, and Upper Part of the Trunk, deeper ſeated than thoſe repreſented in Figure 1. of the former Table.

A, Temporalis.—B, Maſſeter.—C, Pterygoideus internus.—D, Mylo-hyoideus.—E, E, Complexi.—F, F, Splenii.—G, The origins of the left ſplenius.—H, H, Levatores ſcapulæ.—I, Rhomboides minor of the right ſide.—K, Rhomboides major of that ſide.—L, Serratus poſticus ſuperior of the left ſide.—M, Semiſpinalis dorſi of the ſame ſide.—N, N, Spinales dorſi.—O, O, Longiſſimi dorſi.—P, P, Sacro-lumbales.

FIG. 2.

The Third Layer of Muscles on the Right, and Fourth Layer of Muscles on the Left Side of the Poſterior Part of the Body.

Right Side; Head and Trunk.—A, Back-part of the buccinator.—B, Pterygoideus internus.—C, Mylo-hyoideus.—D, E, Complexus.—E, A fleſhy portion from the ſpinous proceſs of the firſt dorſal vertebra.—F, Obliquus capitis ſuperior, and immediately below it, the obliquus capitis inferior.—G, Trachelo-maſtoideus.—H, Tranſverſalis colli.—I, Cervicalis deſcendens.—K, Scalenus medius.—L, Scalenus poſticus.—M, Semi-ſpinalis colli.—N, N, Interſpinales colli.—O, O, Portions of the intercoſtales externi, called by Albinus, Levatores Coſtarum.—P, P, P, Intercoſtales externi.—Q, Loweſt of the intercoſtales interni.—R, Tranſverſalis abdominis.—S, The inner layer of the aponeuroſis, common to the ſerratus poſticus inferior, and obliquus internus abdominis.—T, T, T, Spinalis dorſi. Between the ſpinous proceſſes of the vertebræ of the back, and likewiſe between thoſe of the loins, the interſpinales dorſi, et lumborum, appear.—U, Tendon covering, and partly giving origin to the common head of the longiſſimus dorſi and ſacro-lumbalis.—V, Part of that tendon running along the longiſſimus dorſi.—W, Longiſſimus dorſi.—X, A portion of that muſcle which joins the cervicalis deſcendens.—Y, Sacro-lumbalis.

Superior Extremity.—A, Teres major.—B, Part of the ſubſcapularis.—C, Coraco-brachialis.—D, Part of the brachialis internus.—E, Brachialis externus, or third head of the triceps extenſor cubiti.—F, Extenſor carpi radialis longior.—G, Extenſor carpi radialis brevior.—H, Flexor profundus perforans.—I, Supinator radii brevis.—K, Flexor longus pollicis.—L, Pronator radii quadratus.—M, M, Tendons of the extenſors cut off.—N, Flexor brevis pollicis.—O, Adductor pollicis.—P, Prior indicis.—Q, Poſterior indicis.—R, Prior medii digiti.—S, Poſterior medii digiti.—T, Prior annularis.—U, Poſterior annularis.—V, Prior auricularis.

Inferior Extremity.—A, B, Gluteus minimus;—B, Its tendon.—C, Obturator internus.—D, Obturator externus.—E, Tendon common to the iliacus internus, and pſoas magnus.—F, G, H, Semi-membranoſus;—F, Its tendinous origin;—G, Its fleſhy belly;—H, Its tendinous inſertion into the tibia.—I, I, Gracilis.—K, K, K, Adductor magnus femoris.—L, Short head of the biceps flexor cruris.—M, M, Origins of the gemellus.—N, Origin of the plantaris.—O, Popliteus.—P, Tibialis poſticus.—Q, Its tendon paſſing behind the inner ankle.—R, Flexor longus digitorum.—S, Flexor longus pollicis.—T, Peroneus longus.—U, Its tendon paſſing to the ſole.—V, Peroneus brevis;—W, Its tendon.—X, Extenſor brevis digitorum.—Y, Part of the flexor longus digitorum.

Left Side; Head and Trunk.—A, Rectus capitis poſticus minor.—B, Rectus capitis poſticus major.—C, Obliquus capitis ſuperior.—D, Obliquus capitis inferior.—E, Scalenus medius.—F, F, Intertranſverſales colli.—G, G, G, G, Multifidus ſpinæ.—H, H, Intertranſverſales dorſi.—I, I, Intertranſverſales lumborum.—K, K, Intercoſtales interni.—L, L, L, The pleura.

Superior Extremity.—A, Subſcapularis.—B, Supinator brevis.—C, Pronator radii quadratus.—D, Flexor brevis pollicis.—E, E, Adductor pollicis.

Inferior Extremity.—A, Iliacus internus.—B, Inſertion of the pſoas magnus and iliacus internus.—C, Obturator externus.—D, E, F, G, Adductor magnus femoris.—F, Tendon; the ſhaded part around it is an impreſſion made by the ſemimembranoſus.—H, Tendon of the tibialis poſticus paſsing behind the inner ankle.—I, Peroneus brevis.

FIG. 3.

View of the Muscles upon the Under and Back Part of the Head, and Back-Part of the Neck.

A, The cut edge of the integuments.—B, Os occipitis.—C, Inſertion of the ſplenius.—D, The complexus turned aſide.—E, E, Recti majores, the left one turned down.—F, F, Recti minores.—G, G, Obliqui ſuperiores.—H, Obliqui inferiores.—I, The Maſtoid proceſs of the left ſide.—K, The atlas, or firſt vertebra of the neck.—L, Part of the complexus.—M, M, Semiſpinales colli.—N, Upper part of the multifidus ſpinæ.—O, O, Interſpinales colli.

FIG. 4.

Muscles on the Side and Back Part of the Head and Neck, not ſufficiently ſhewn in the former Figure.

a, Rectus capitis poſticus minor.—*b*, Rectus capitis lateralis.—*c*, Ligament between the firſt and ſecond cervical vertebræ.—*d*, *d*, Interſpinales colli.—*e*, *e*, Intertranſverſales colli.—*f*, The palate, covered with its glandular membrane.—*g*, The glands appearing after the uvula is cut off.—*h*, The ſeptum narium next the fauces.

FIG. 5.

The Aponeurosis, and part of the Firſt Layer of Muscles and Ligaments on the Sole, after removing the common Integuments.

a, *b*, *c*, Aponeuroſis plantaris.—*d*, Abductor pollicis.—*e*, The common tendinous end of the flexor brevis and abductor pollicis.—*f*, Ligaments binding the tendon of the flexor longus pollicis. Between the roots of the toes, the inſertions of the lumbricales and internal interoſſei appear.—*g*, *g*, Traſverſalis pedis.—*h*, Abductor minimi digiti. Upon the four ſmall toes are ſeen the retaining ligaments and tendons of the flexor ſublimis and profundus, as in the hand.

FIG. 6.

The Firſt Order of Muscles on the Sole, after the Aponeuroſis Plantaris has been removed.

a, Flexor brevis digitorum pedis, ſending off four tendons, which are ſplit by the tendons of the flexor longus.—*b*, Tendon of the flexor longus pollicis.—*c*, Abductor pollicis.—*d*, *e*, Abductor minimi digiti.—*f*, Flexor parvus minimi digiti.—At the roots of the toes are ſeen, part of the lumbricales, interoſſei, and tranſverſalis pedis.

FIG. 7.

Repreſents the Second Order of Muscles on the Sole.

a, The tendon of the flexor longus digitorum.—*b*, *c*, *d*, Flexor digitorum acceſſorius;—*b*, *c*, Its two heads ariſing from the os calcis;—*d*, Its inſertion into the tendon of the flexor longus digitorum.—*e*, Connection between the tendon of the flexor longus digitorum, and flexor longus pollicis.—*f*, *f*, The inſertion of the tendons of the flexor longus digitorum into the laſt bone of the ſmall toes.—*g*, *g*, *g*, *g*, Lumbricales.—*h*, Flexor longus pollicis;—*i*, Its inſertion into the laſt joint of the great toe.—*k*, Inſertion of the tibialis poſticus.—*l*, Inſertion of the tibialis anticus.—*m*, *n*, The two parts of the flexor brevis pollicis.—*m*, The part from which the abductor pollicis has been cut away.—*o*, Inſertion of the peroneus brevis.—*p*, Tendon of the peroneus longus paſſing to the ſole.—*q*, *r*, Ligaments connecting the bones of this part of the foot, and giving origin to muſcles.

Part of the lumbricales, interoſſei, and tranſverſales pedis, are ſeen at the roots of the toes, as in the former Figure.

FIG. 8.

The Third Order of Muscles on the Sole.

a, Inſertion of the peroneus brevis.—*b*, Courſe of the tendon of the peroneus longus.—*c*, Inſertion of the tibialis poſticus.—*d*, *e*, Ligament binding the os cuboides to the os calcis, and giving origin to muſcles.—*f*, Flexor brevis minimi digiti.—*g*, Adductor pollicis.—*h*, *i*, *k*, Flexor brevis pollicis;—*h*, Its tendinous origin;—*i*, Its connection with the adductor pollicis;—*k*, Its connection with that part from which the abductor was cut.—*l*, Tranſverſalis pedis.

FIG. 9.

The Fourth Order of Muscles on the Sole.

a, Inſertion of the peroneus brevis.—*b*, The tendon of the peroneus longus.—*c*, Inſertion of the tibialis anticus.—*d*, Abductor, and—*e*, Adductor indicis pedis.—*f*, Abductor, and—*g*, Adductor medii digiti.—*h*, Abductor, and—*i*, Adductor tertii digiti.—*k*, Adductor minimi digiti pedis.

Tab. II.

Fig. 1.

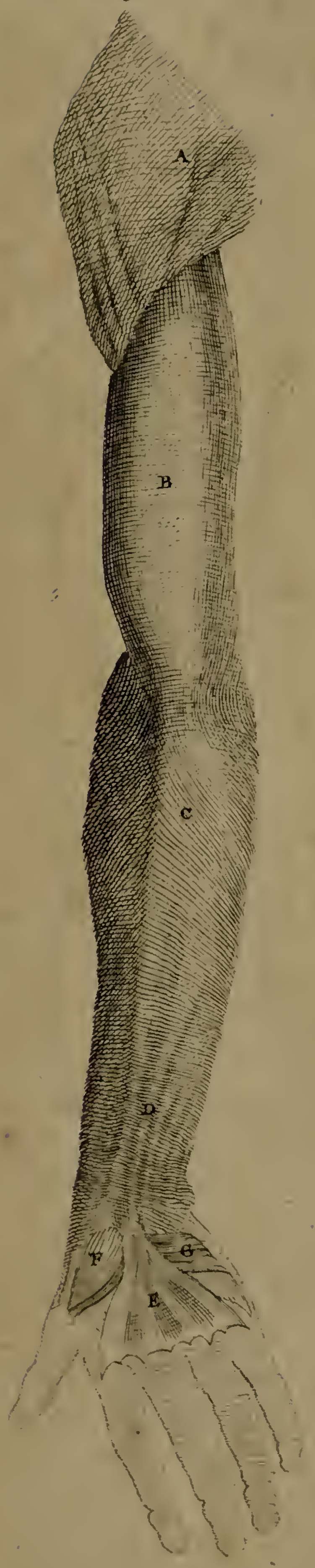


Fig. 2.

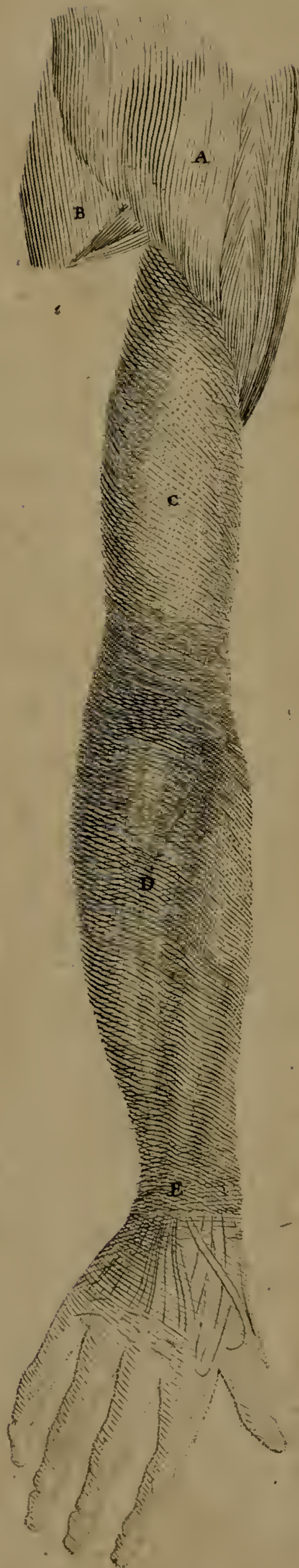


Fig. 3.

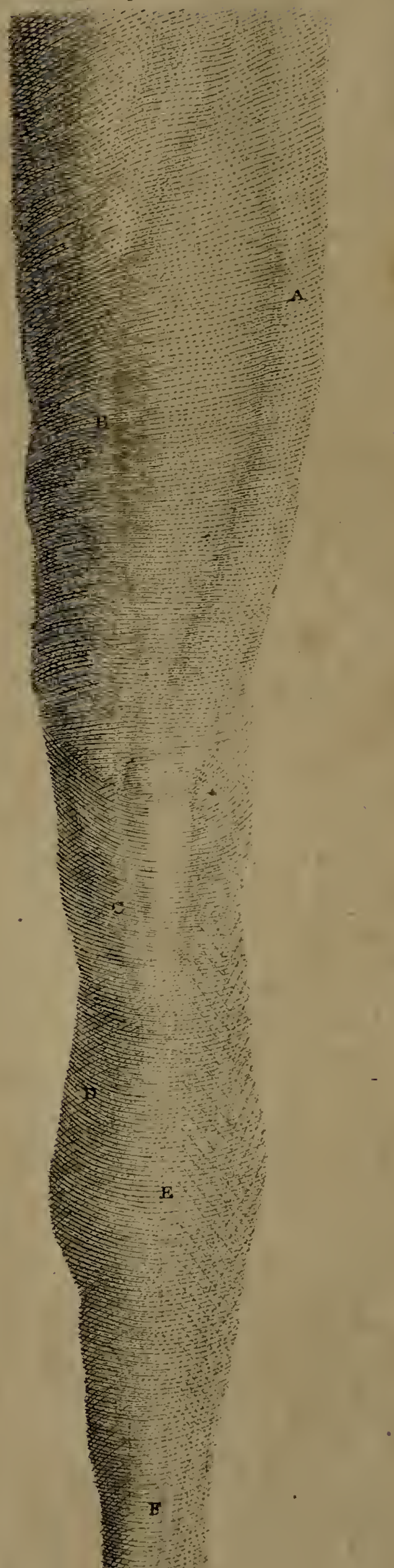


Fig. 4.

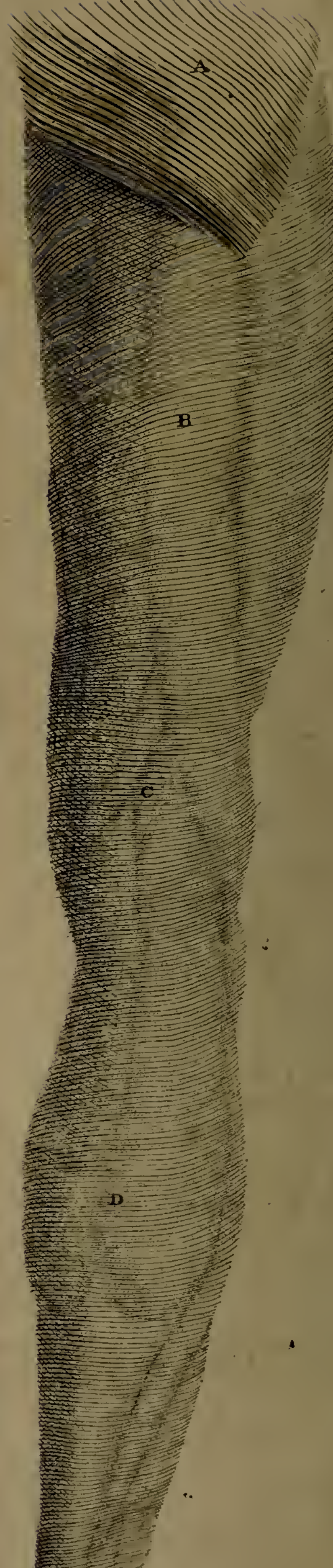


TABLE XI.

Represents the Aponeuroses or Tendinous Membranes, which appear upon removing the Common Integuments, and which cover the Muscles of the Extremities.

The Figures of this Table are copied from Nature.—*The Outlines correſpond with thoſe of Table* I. *and* V. *of* Albinus.

FIG. 1.

Gives a View of the Aponeurosis, which covers the Muscles on the Fore-part of the Superior Extremity.

A, The deltoid muſcle.—B, The aponeuroſis, ſent off from the tendons of the muſcles on the ſhoulder to cover the flexor muſcles of the fore-arm.—C, Aponeuroſis continued from the fore-ſide of the arm, joined to a thicker and ſtronger one ſent off from the tendon of the biceps flexor cubiti, to cover the muſcles on the anterior part of the fore-arm.—D, The continuation of this aponeuroſis, covering the tendons of the flexor muſcles of the hand and fingers, which, on account of its thinneſs, are ſeen ſhining through it.—E, Aponeuroſis palmaris. Above, it is connected chiefly to the tendon of the palmaris longus, and to the anterior tranſverſe ligament of the wriſt; below, it is fixed to the roots of the four fingers by an equal number of double ſlips.—F, The muſculus abductor pollicis.—G, Palmaris brevis.

FIG. 2.

Shews the Aponeurosis upon the Back-part of the Superior Extremity.

A, The deltoid muſcle.—B, Aponeuroſis covering the infra-ſpinatus muſcle, ſimilar to one which covers the ſupra-ſpinatus.—C, The aponeuroſis which covers the back-part of the arm, ſent down from the tendons of the muſcles on the ſhoulder, and with the aponeuroſis on the fore-ſide of the arm, forming a ſheath, which incloſes the muſcles on the upper part of the arm.—D, The aponeuroſis of the back-part of the fore-arm, continued from that which covers the back-part of the upper arm, and likewiſe from the tendon of the triceps extenſor cubiti muſcle, many of the fibres intermixing with, and decuſſating each other, at the oppoſite ſides of the fore-arm.—E, A thick and ſtrong portion of the aponeuroſis on the back-part of the fore-arm, forming the ligamentum carpi annulare poſterius.

FIG. 3.

Repreſents the Aponeurosis upon the Fore-part of the Inferior Extremity.

A, The thick and ſtrong aponeuroſis at the fore and outer part of the thigh, ſent down from the muſcles about the pelvis, and from the under end of the external oblique muſcles of the abdomen.—B, An aponeuroſis covering the muſcles upon the fore and inner part of the thigh, much thinner and weaker than that farther out.—C, An attachment of the aponeuroſis of the thigh to the head of the tibia.—D, Aponeuroſis of the inſide of the thigh, fixed to the correſponding ſide of the tibia.—E, F, Aponeuroſis ſent from the faſcia of the thigh, and from the extenſor muſcles of the leg, to cover the muſcles on the fore-part of the leg. This aponeuroſis, like that on the thigh, is thick and ſtrong at the outer, and becomes gradually thinner towards the inner part of the leg.—G, H, Parts of this aponeuroſis thicker and ſtronger than the reſt, forming the ſuperior and inferior ligaments of the tarſus.

FIG. 4.

Aponeurosis on the Back-part of the Inferior Extremity.

A, The large gluteus muſcle.—B, Aponeuroſis of the back-part of the thigh, ariſing from the tendons of the glutei muſcles, and from thoſe of the loins, fixed to the linea aſpera of the os femoris.—C, Continuation of this aponeuroſis covering the muſcles, veſſels, nerves, &c. of the ham.—D, That part of the aponeuroſis which covers the gemelli muſcles. From this part, the aponeuroſis is continued down, and loſt upon the foot.

TAB XII.

FIG. 1.

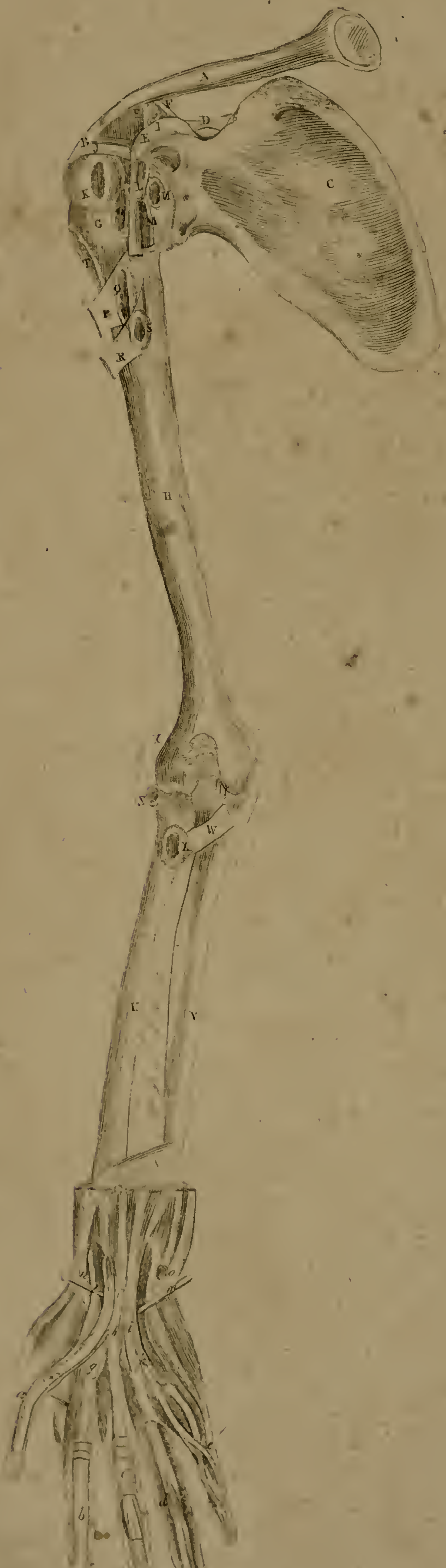
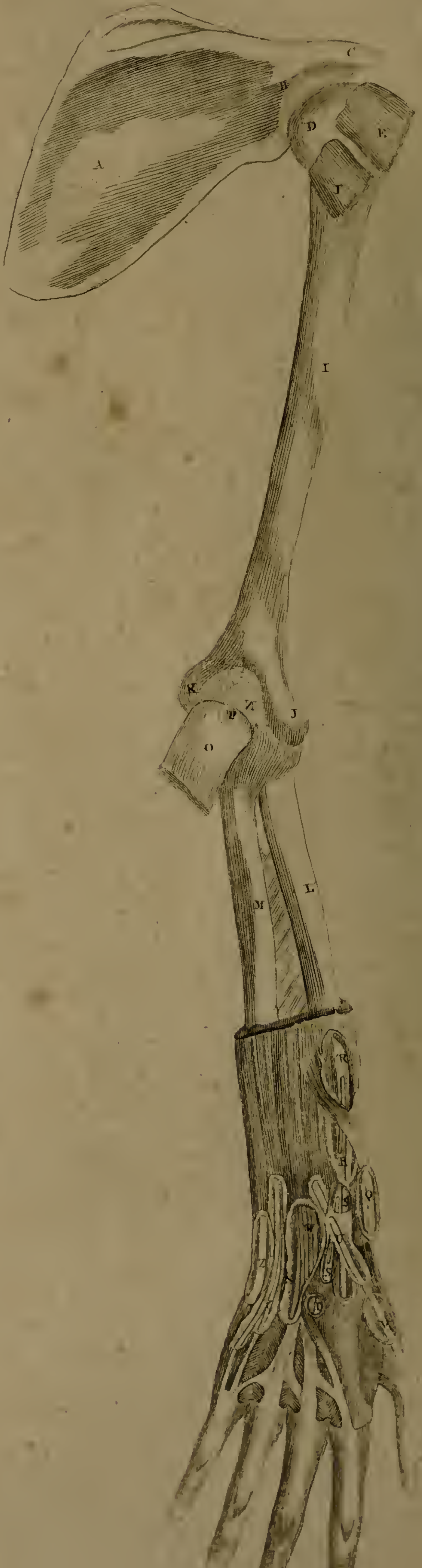


FIG. 2.



The two following Tables, copied from Dr Monro's Work on the Burſæ Mucoſæ, repreſent all the Burſæ hitherto diſcovered.

TABLE XII.

Repreſents the Burſæ Mucoſæ of the Superior Extremity.

FIG. 1.

The Burſæ Mucoſæ on the Fore-part of the Superior Extremity.

A, The clavicle.—B, The acromion ſcapulæ.—C, The fore-part of the ſcapula.—D, Ligament of the ſemilunar notch of the ſcapula.—E, The coracoid porceſs of the ſcapula.—F, F, Two ligaments which tie the clavicle to the coracoid proceſs.—G, The head of the os humeri.—H, The body of that bone.—I, A burſa interpoſed where the clavicle plays on the coracoid proceſs.—J, A ſtrong ligament which joins the acromion to the coracoid proceſs.—K, A large burſa between the acromion and ligament J, and the capſular ligament of the humerus.—L, A ſmall burſa, which is ſometimes wanting, between the point of the coracoid proceſs and capſular ligament of the humerus.—M, Tendon of the ſubſcapularis muſcle.—N, A burſa between it and the capſular ligament of the humerus, which frequently communicates with the cavity of that joint.—O, A burſa, which is ſometimes wanting, between the origin of the coraco-brachialis and ſhort head of the biceps muſcle, and capſular ligament of the humerus.—P, Tendon of the teres major, turned outwards.—Q, A burſa between the tendon of the teres major and the os humeri, and upper part of the tendon of the latiſſimus dorſi.—R, The tendon of the latiſſimus dorſi, turned outwards.—S, A ſmall burſa between the tendon of the latiſſimus dorſi and os humeri.—T, A burſa between the tendon of the biceps flexor cubiti and the humerus.—U, The radius.—V, The ulna.—W, The tendon of the biceps flexor cubiti, turned inwards.—X, A burſa, with a *peloton* of fat, between the tendon of the biceps and tubercle of the radius.—Y, The origin of the extenſor carpi radialis longior.—Z, A ſmall burſa between the tendon common to the extenſor carpi radialis brevis, and extenſor digitorum communis, and the round head of the radius.—*a*, The ſheath of the flexor longus pollicis, ſlit open.—*b*, The ſheath of the flexors of the fore-finger, entire.—*c*, The thick part of the ſheath of the tendons of the flexors of the middle-finger.—*d*, The ſheath of the tendons of the flexors of the ring-finger, ſlit open.—*e*, The ſheath of the tendons of the flexors of the little-finger, ſlit open, and the tendons drawn forwards to ſhew them fully.—*f*, A very large burſa for the tendon of the flexor pollicis longus.—*g, h, i, k,* Four ſhort burſæ on the fore-part of the tendons of the flexor ſublimis of the fingers.—*l*, A probe introduced into a large burſa between the tendon of the flexor pollicis longus, and the fore-part of the radius, and capſular ligament of the os trapezium.—*m*, A probe put into a large burſa behind the tendons of the flexor digitorum profundus, and on the fore-parts of the end of the radius, and capſular ligament of the wriſt. In ſome inſtances the two laſt-mentioned burſæ are found to communicate with each other.—*n*, A burſa between the tendon of the flexor carpi radialis and os trapezium.—*o*, A burſa between the tendon of the flexor carpi ulnaris and os piſiforme.

FIG. 2.

The Burſæ Mucoſæ on the Back-part of the Superior Extremity.

A, The dorſum of the ſcapula.—B, The cervix of the ſcapula.—C, The acromion.—D, The capſular ligament of the humerus.—E, The tendon of the infra-ſpinatus, turned outwards.—F, The tendon of the teres minor, turned outwards.—I, The os humeri.—J, The external condyle of the humerus.—K, The internal condyle of the humerus.—L, The radius.—M, The ulna.—N, The olecranon.—O, The tendon of the triceps extenſor cubiti, turned down.—P, A ſmall burſa between it and the olecranon.—Q, A burſa between the tendon of the extenſor oſſis metacarpi pollicis and the radius.—R, R, A large burſa common to the extenſores carpi radiales.—S, S, Another burſa common to the extenſores carpi radiales.—T, A third burſa at the inſertion of the tendon of the extenſor carpi radialis brevior.—U, A burſa for the tendon of the extenſor ſecundi internodii pollicis, which communicates with the burſa S, S.—V, Another burſa between the tendon of the extenſor ſecundi internodii pollicis and metacarpal bone of the thumb.—W, Tendons of the extenſor of the fore, mid, and ring-fingers.—X, A burſa between theſe tendons and the ligament of the wriſt.—Y, Another burſa for the extenſor of the little-finger.—Z, A burſa between the tendon of the extenſor carpi ulnaris and ligament of the wriſt.

TABLE XIII.

REPRESENTS the BURSÆ MUCOSÆ of the INFERIOR EXTREMITY.

FIG. 1.

The BURSÆ MUCOSÆ on the Fore-Part of the INFERIOR EXTREMITY.

A, THE ſpine of the os ilium.—B, The inner ſide of the os ilium.—C, The os pubis.—D, The neck of the thigh-bone.—E, The root of the great trochanter.—F, The thigh-bone.—G, The iliacus internus muſcle.—H, The pſoas magnus muſcle.—I, The inſertion of the iliacus internus and pſoas magnus into the trochanter minor.—K, A very large burſa mucoſa between theſe two muſcles and the capſular ligament of the thigh-bone.—L, The pectineus muſcle.—M, A burſa between the tendon of the pectineus and thigh-bone.—N, The adductor brevis femoris.—O, Gluteus minimus.—P, The tendinous part of the Gluteus medius.—Q, A ſmall burſa between the gluteus medius and trochanter major. Behind it the tendon of the pyriformis is inſerted.—R, A burſa between the tendon of the gluteus minimus and trochanter major.—S, Part of the gluteus maximus, which is joined to the gluteus medius.—T, Part of the vaſtus externus.—U, A burſa between the gluteus maximus and vaſtus externus.—V, The patella.—W, The capſular ligament of the knee.—X, The tendon of the extenſors of the leg, cut and turned up.—Y, A large burſa behind the tendon of the extenſors of the leg.—Z, A communication frequently found between this burſa and the cavity of the knee-joint.—*a*, *a*, The ligament which joins the patella to the tibia, cut and turned outwards.—*b*, A burſa behind it.—*c*, A fatty *peloton* hanging down into the cavity of the burſa.—*d*, The tibia.—*e*, The fibula.—*f*, The back-part of the inſertion of the ſartorius muſcle, turned forward.—*g*, The tendon of the gracilis muſcle.—*h*, The tendon of the ſemitendinoſus muſcle.—*i*, A large burſa between the tendons of the ſartorius, gracilis, ſemitendinoſus, and tibia.—*k*, The internal lateral ligament of the knee.—*l*, A burſa between the tendon of the tibialis anticus, and under part of the tibia and ligament of the ankle.—*m*, A burſa between the tendon of the extenſor proprius pollicis pedis, and the tibia and capſular ligament of the ankle.—*n*, A burſa between the tendons of the extenſor digitorum longus, and ligament of the ankle.

FIG. 2.

The BURSÆ MUCOSÆ on the Back-part of the INFERIOR EXTREMITY.

A, The dorſum of the os ilium.—B, The os ſacrum.—C, The os coccygis.—D, The tuber of the os iſchium.—E, The large trochanter.—F, The middle of the thigh-bone.—G, The gluteus minimus.—H, The pyriformis.—I, A burſa mucoſa between the gluteus medius and pyriformis.—K, K, The obturator internus, cut acroſs.—L, L, The gemini muſcles.—M, A burſa between the obturator internus and os iſchium.—N, A probe put into a burſa, which is continued to a dotted line between the obturator internus, gemini, and capſular ligament of the thigh-bone.—O, The quadratus femoris.—P, The origin of the ſemimembranoſus, and long head of the biceps flexor cruris.—Q, A ſmall burſa mucoſa.—R, The origin of the ſemitendinoſus, turned back.—S, A ſmall burſa mucoſa.—T, The tendon of the gluteus maximus.—U, A large burſa between the tendon of the gluteus maximus and root of the trochanter major.—V, V, Two ſmall burſæ between the tendon of the gluteus maximus and thigh-bone.—W, The back-part of a large burſa between the tendinous part of the gluteus maximus and vaſtus externus.—X, The internal condyle of the thigh-bone.—Y, The external condyle of the thigh-bone.—Z, The tibia.—*a*, The fibula.—*b*, The biceps flexor cruris, turned downwards.—*d*, The inner head of the gemellus muſcle, turned up.—*e*, The ſemimembranoſus muſcle, turned down.—*f*, A burſa between the tendons of the ſemimembranoſus and gemellus, and the ligament of the knee.—*g*, A probe paſſed into a ſmall burſa within the burſa *f*, from which there is a paſſage into the cavity of the joint of the knee.—*h*, A probe paſſed into a burſa between the tendon of the ſemimembranoſus and the lateral internal ligament of the knee, from which there is a paſſage communicating with the joint of the knee.—*i*, A ſmall portion of the popliteus muſcle.—*l*, A burſa under it, communicating with the cavity of the joint of the knee.—*n*, The tendon of the peroneus longus.—*o*, The tendon of the peroneus brevis.—*p*, A large burſa common to the tendons of the peronei muſcles.—*q*, A burſa proper to the tendon of the peroneus brevis.—*r*, A ligament which ties the fibula to the os calcis.—*s*, The tendo Achillis, turned down.—*t*, A burſa between the tendo Achillis and os calcis.—*u*, A *peloton*, or maſs of fat, which projects into the cavity of that burſa.—*v*, The tendon of the muſculus plantaris.—*w*, A burſa between the os calcis and flexor pollicis longus.—*x*, Flexor digitorum longus.—*y*, A burſa between that flexor and the tibia and os calcis.—*z*, The tendon of the tibialis poſticus.—*&*, A burſa between this tendon and the tibia and aſtragalus.

FIG. 3.

View of the BURSÆ MUCOSÆ in the SOLE of the FOOT.

A, The os calcis.—B, The tendo Achillis.—C, C, Abductor digiti minimi, cut acroſs.—D, The tendon of the peroneus longus.—E, A ſecond burſa for that tendon.—F, An oblong *peloton* of fat within this burſa.—G, The fleſhy,—H, The tendinous part of the flexor pollicis pedis longus.—I, A burſa common to this tendon, and the tendon of the flexor digitorum profundus.—K, A fatty *peloton* at the upper end of this burſa.—L, An imperfect ſeptum between the two laſt-named tendons, containing ſome fat.—M, The tendon of the tibialis poſticus in its burſa.—N, The place at which the flexor digitorum ſublimis is cut off.—O, The maſſa carnea Jacobi Sylvii, or flexor tertius.—P, The abductor pollicis pedis, cut off from the os calcis.—Q, R, S, T, U, Burſæ mucoſæ of the flexor tendons, ſlit open nearly their whole length.

TAB. XIV.

FIG. 1.

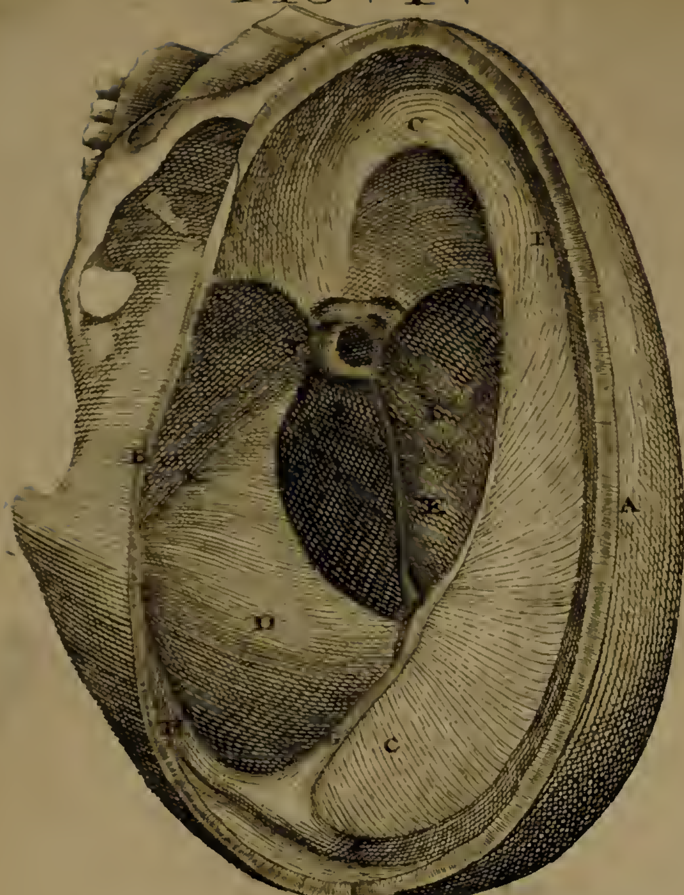


FIG. 2

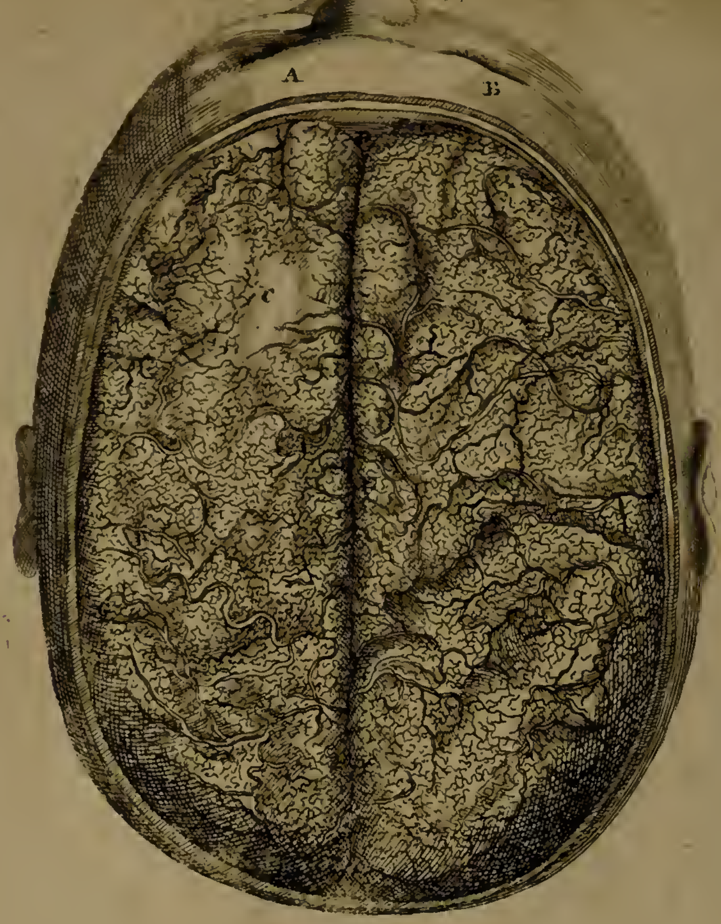


FIG. 3.

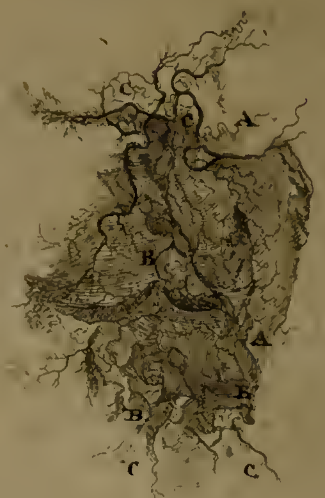


FIG. 4.

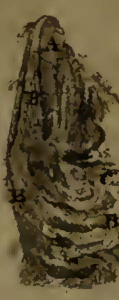


FIG. 5.

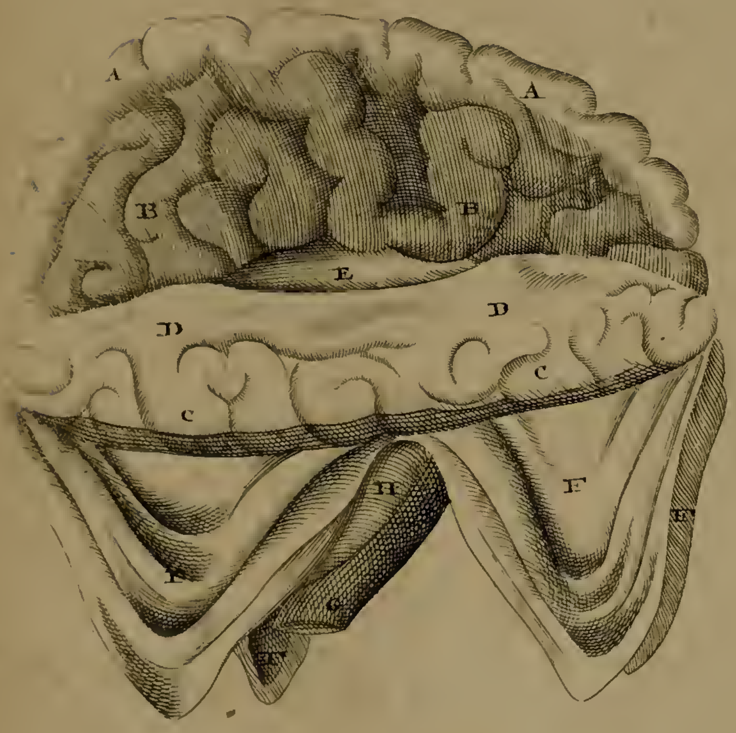


FIG. 6

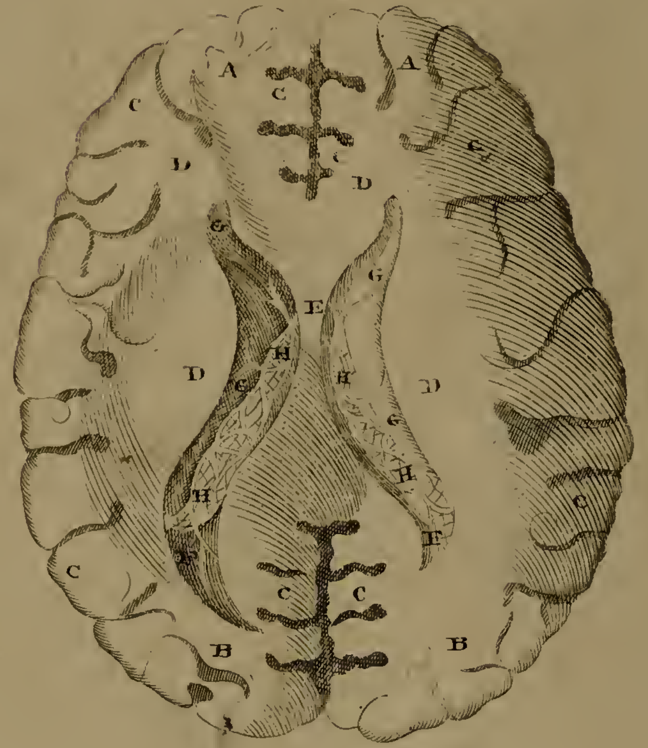


FIG. 7.

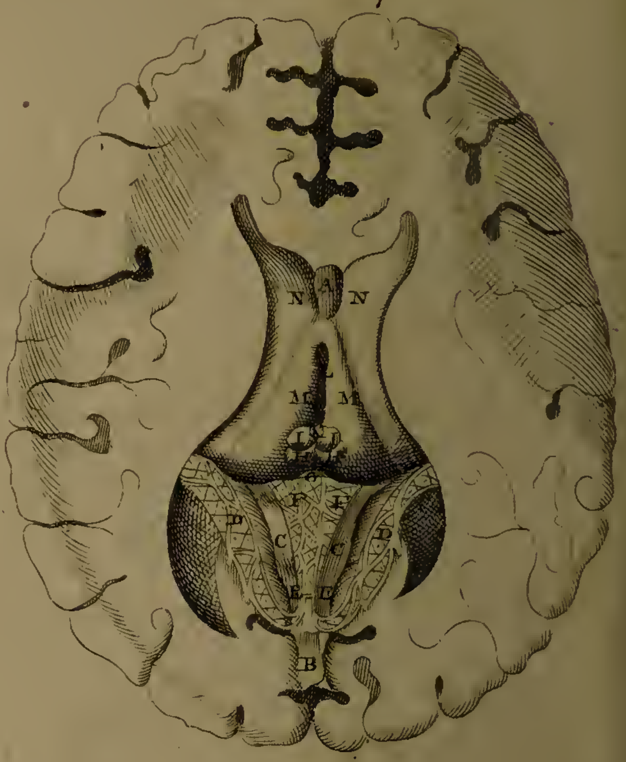


FIG. 8.

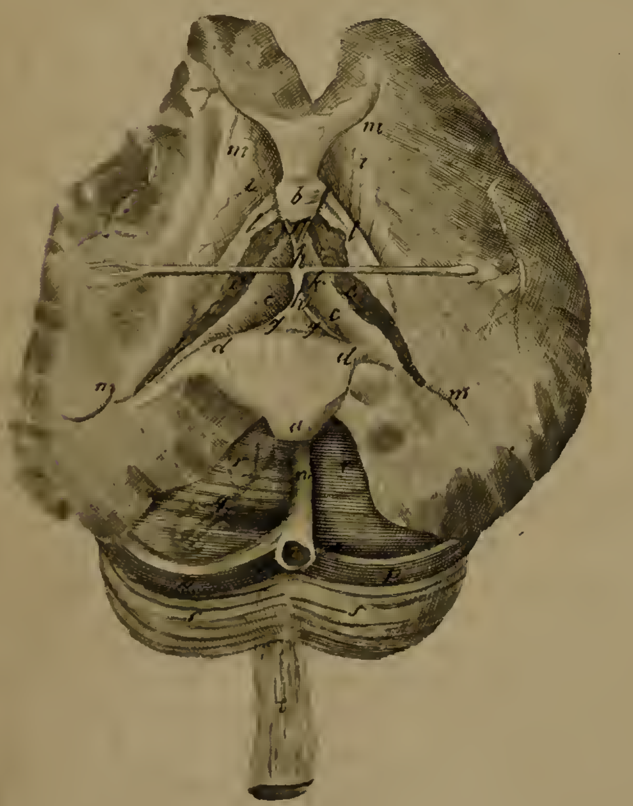


FIG. 9.

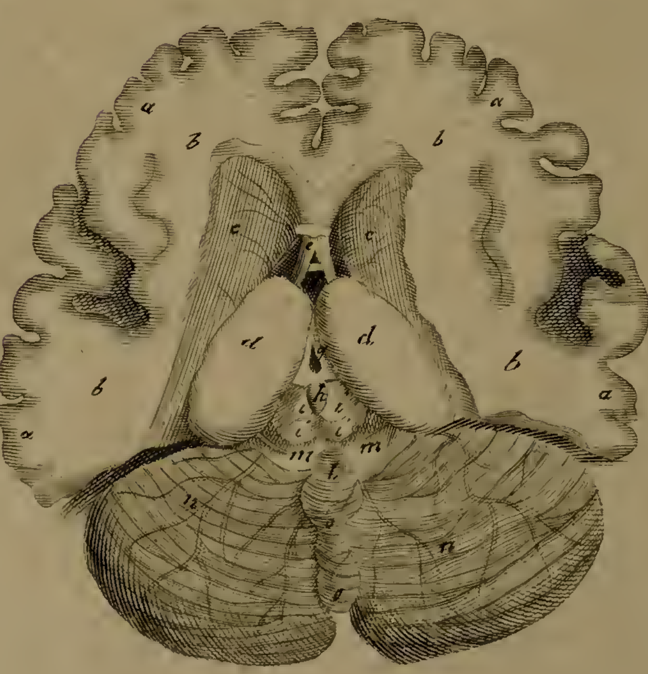


FIG. 10.

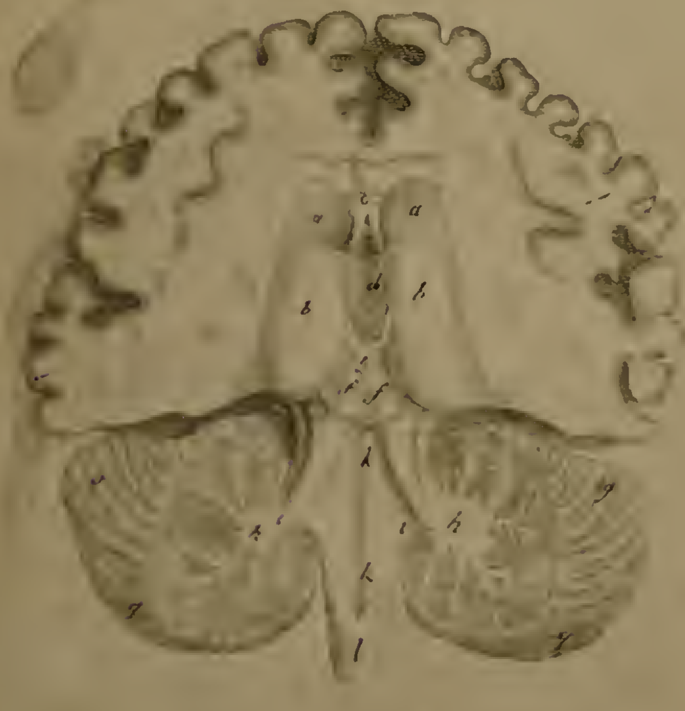


FIG. 11.

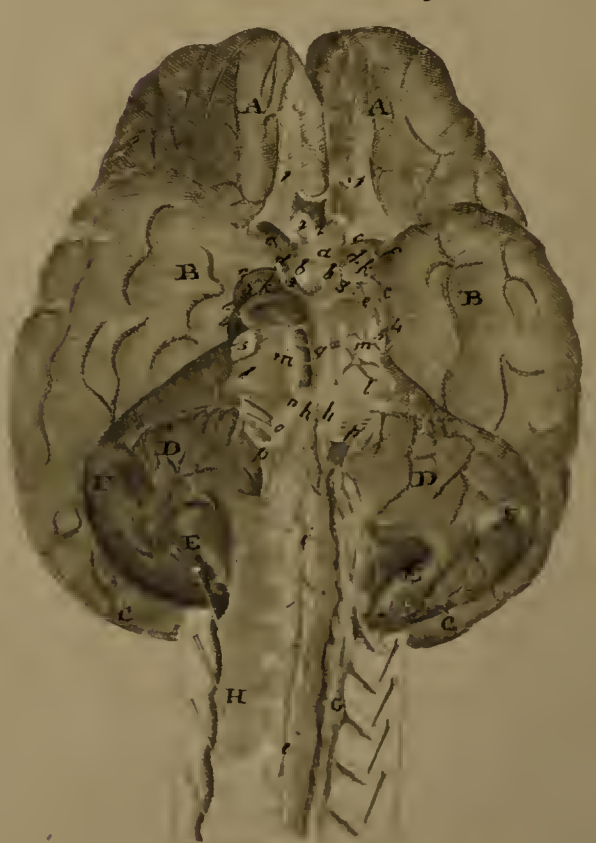


FIG. 12.

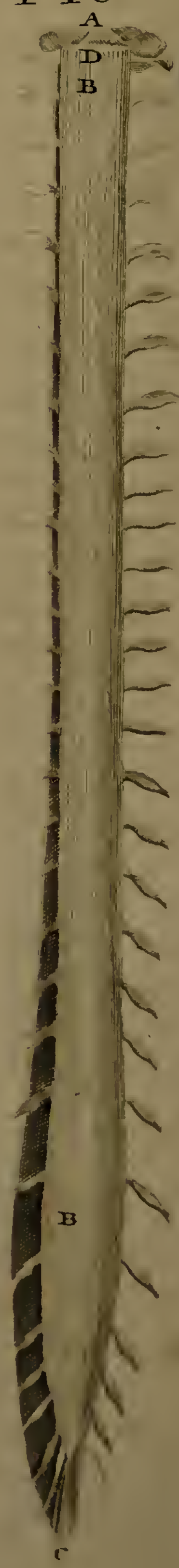


FIG. 13.

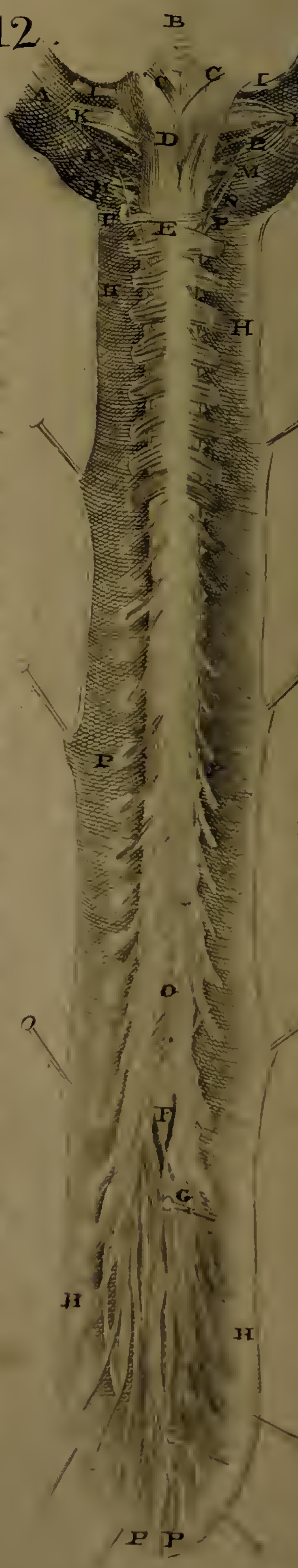


FIG 1

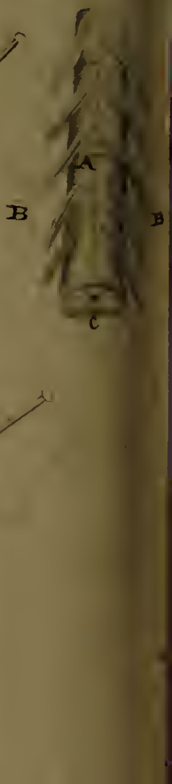


TABLE XIV.

VIEWS of the BRAIN and SPINAL MARROW.

FIG. 1. From the LIFE.

SHEWS the DURA MATER, with its Proceſſes and Sinuſes.

A, Section of the upper part of the ſkull.—B, Horizontal ſection of the ſkull.—C, C, Falx of the dura mater.—D, Left ſide of the tentorium.—E, Right ſide of the tentorium.—F, F, Superior longitudinal ſinus.—G, Torcular Herophili.—H, Left lateral ſinus.—I, Left cavernous ſinus.—K, Left petroſal ſinus.—L, Right petroſal ſinus.

FIG. 2. From RUYSCH.

A View of the Upper Part of the BRAIN of a YOUNG PERSON, with the VESSELS minutely injected.

A, B, The under part of the forehead.—C, A portion of the tunica arachnoidea, raiſed by inflation.—D, Spinous part of the frontal bone, inſinuating itſelf between the hemiſpheres of the brain.—E, Groove between the two hemiſpheres of the brain, from which very numerous arteries emerge, and are connected by anaſtomoſes, in an infinite number of places, with —F, The lateral arteries of the brain.—G, G, G, The furrows or circumvolutions of the brain, covered by the pia mater and tunica arachnoidea, by which their depth is concealed.

FIG. 3. From RUYSCH.

Shews a Portion of the Pia Mater A, A, covering the brain with its proceſſes B, B, B, inſinuating themſelves within the circumvolutions of the brain, and winding along in a ſerpentine direction.—Numberleſs arteries, C, C, &c. are ſeen diſperſed over it, which in the ſubject itſelf are ſtill more numerous.

FIG. 4. From RUYSCH.

Shews the Pia Mater A, covering the cerebellum,—from a young ſubject.—The ſame number of falciform proceſſes, B, are found in it, as there are circumvolutions in the cerebellum.—Only a few lateral branches of arteries are added; for, had the whole been repreſented, the falciform proceſſes would have been obliterated.—*c*, Shews the very ſhort, delicate, and numerous ſmall arteries, coming from the inner ſurface of the pia mater, and reſembling a ſpecies of moſs, which the author of this Figure ſays,—he was the firſt to diſcover.

FIG. 5. From EUSTACHIUS.

The BRAIN viewed on the Right Side, with the DURA MATER.

A A, B B, Left hemiſphere of the brain.—B B, That part which is oppoſed to the falx.—C C, D D, Tranſverſe ſection of the right hemiſphere, a little above the corpus calloſum.—C, C, The cortical part, and intervening medullary portions.—D, D, The medullary part.—E, Corpus calloſum.—F, F, F, F, Section of the dura mater into four parts, with its depending angles.—G, Medulla oblongata.—H, Cerebellum.

FIG. 6. From EUSTACHIUS.

Tranſverſe Section of the BRAIN, upon a level with the LATERAL VENTRICLES, which are laid open.

A, A, Anterior lobes of the brain.—B, B, The poſterior lobes.—C, C, C, Section of the cortical part of the brain, and of the medullary portions which are intermixed with it.—D, D, D, D, The medullary part.—E, Part from which the corpus calloſum is diſſected.—F, G, G, H, H, F, G, G, H, H, Left ventricles of the brain.—G, G, G, G, Corpora ſtriata.—H, H, H, H, Choroid plexuſes, compoſed chiefly of blood-veſſels which ariſe from the lateral ventricles.

FIG. 7. From EUSTACHIUS.

Is nearly ſimilar to the preceding; but differs in this,—that the Fornix and Choroid Plexus are diſſected from the anterior parts, and turned back.

A, Section of the anterior crus of the fornix.—B, The other ſection of the fornix, turned back.—C, C, Inferior part of the fornix, turned back.—D, D, Inferior part of the choroid plexus, alſo turned back with the fornix.—E, E, Trunks formed by the veins of the choroid plexus.—F, F, Continuation of the veins of the choroid plexus, paſſing under the fornix to the fourth ſinus of the dura mater.—G, A ſmall portion of the cerebellum.—H, H, The teſtes.—I, I, The nates.—K, The pineal gland.—L, The third ventricle.—M, M, The thalami nervorum opticorum.—N, N, Corpora ſtriata.—In the grooves between the corpora ſtriata, and thalami nervorum opticorum, is placed the centrum ſemicirculare geminum.

FIG. 8. From RIDLEY.

Gives a VIEW of a SECTION of the BRAIN, nearly of the ſame Depth with that of Fig. 7.—It alſo repreſents a portion of the CEREBELLUM covered by the DURA MATER, with Part of the Large BLOOD-VESSELS which are injected,—and of the SPINAL MARROW.

a, The fornix cut at its anterior crus, and turned back;—*b*, Its anterior crus dividing into two.—*c*, *c*, Thalami nervorum opticorum.—*d*, *d*, The thick prominent part of the crura fornicis, called Pedes Hyppocampi.—*e*, *e*, The choroid plexus.—*f*, The part where the two plexus meet under the fornix.—*g*, *g*, Other parts of the choroid plexus, lying under the poſterior crura of the fornix.—*h*, *h*, Large veins of the choroid plexus, ſupported by a probe, in their paſſage backwards to the fourth ſinus of the dura mater.—*i*, *i*, The corpora ſtriata.—*k*, The rima of the third ventricle, concealed by the large veins of the choroid plexus.—*l*, *l*, Centrum ſemi-circulare geminum.—*m m*, *m m*, Centrum ovale of Vieuſſens.—*n*, The fourth ſinus of the dura mater.—*o*, The termination of the ſuperior longitudinal ſinus.—*p*, *p*, The lateral ſinuſes.—*q*, A large vein entering one of the lateral ſinuſes.—*r*, *r*, The cerebellum covered by the tentorium.—*ſ*, *ſ*, The under and back part of the cerebellum, covered by a continuation of the dura mater.—*t*, The ſpinal marrow.

FIG. 9. From LIEUTAUD.

Section of the BRAIN, the Fornix and Choroid Plexus being removed, to ſhew the Connection of the THALAMI NERVORUM OPTICORUM; the Anterior and Poſterior COMMISSURES; the PINEAL GLAND; the TUBERCULA QUADRIGEMINA; the VALVULA VIEUSSENII, &c.

a, *a*, *a*, *a*, The cortical, or cineritious ſubſtance of the brain, which ſurrounds the whole of—*b*, *b*, *b*, *b*, The medullary, or white ſubſtance of the brain.—*c*, *c*, The corpora ſtriata, of an aſhy colour.—*d*, *d*, The thalami nervorum opticorum, of a white colour.—*e*, The anterior pillar, ſeparated from the reſt of the fornix, and turned forward, to ſhew the two ſhort columns which ſupport it, and the anterior commiſſure which unites them.—*f*, The anterior opening common to the two lateral ventricles, and to the third ventricle.—*g*, The poſterior opening, which is ſhut up by a vaſcular membrane and choroid plexus.—*h*, The pineal gland.—*i*, *i*, *i*, *i*, Tubercula quadrigemina, or nates and teſtes.—*l*, The large valve of Vieuſſens.—*m*, *m*, The fourth pair of nerves.—*n*, *n*, The cerebellum, with blood-veſſels running upon its ſurface.—*o*, *o*, Proceſſus vermiformis.

FIG. 10. From LIEUTAUD.

Repreſents a Deeper Section than Figure 9. of the BRAIN of another Subject. The Thalami Nervorum Opticorum are ſeparated, ſo as to bring the third Ventricle into view; and by a Vertical Section of the Cerebellum, the Arbor Vitæ and fourth Ventricle are ſeen.

a, *a*, Corpora ſtriata.—*b*, *b*, Thalami nervorum opticorum. *c*, Anterior pillar of the fornix.—*d*, The third ventricle, at the anterior part of which is ſeen the beginning of the infundibulum.—*e*, Pineal gland.—*f*, *f*, Tubercula quadrigemina.

TABLE XIV. CONTINUED.

mina.—*g, g, g, g,* The two portions of the cerebellum.—*h, h,* The medullary ſubſtance of the cerebellum, commonly called the Arbor Vitæ.—*i i, k k,* The fourth ventricle.—*k, k,* The groove in the ventricle, called Calamus Scriptorius.—*l,* Extremity of the medulla oblongata.

FIG. 11. From Ridley.

Exhibits the Base of the Brain, with part of the Spinal Marrow, and the Blood-Vessels which are injected with Wax.

A, A, The anterior lobes of the Brain.—B, B, The lateral lobes.—C, C, The poſterior lobes.—D, D, The cerebellum.—E, E, The vertebral arteries, where they paſs between the firſt cervical vertebra and occipital bone.—F, F, The lateral ſinuſes.—G, The vertebral ſinus of this ſide.—H, The dura mater of the right ſide, cut and turned back from the ſpinal marrow; on the left ſide, it remains in ſitu.—1. 2. 3. &c. The ten pair of nerves belonging to the brain, with ſeven belonging to the ſpinal marrow.—*a,* The cut end of the infundibulum.—*b, b,* Corpora albicantia, behind the infundibulum.—*c, c,* The internal carotid arteries.—*d, d,* Communicating branches between the internal carotid and vertebral arteries.—*e, e, e, e,* Four principal branches of the vertebral arteries, which run to the back-part of the brain, and to the cerebellum.—*f,* Branches running off from the carotid artery.—*g,* The baſilar artery formed by the two vertebral arteries.—*h, h,* The trunks of the vertebral arteries.—*i, i,* The anterior ſpinal artery.—*k, k,* The crura cerebri.—*l, l,* Crura cerebelli.—*m, m,* The tuber annulare, or Pons Varolii.—*n,* The corpus pyramidale of the right ſide.—*o,* The corpus olivare of that ſide.—*p, p,* The nervi acceſſorii ariſing from the ſpinal marrow.

FIG. 12. From Haller.

Preſents a Poſterior View of the Dura Mater covering the Spinal Marrow and its Nerves; together with the direction, ſituation, and proportional ſize, of the Vertebral Nerves in the Specus of the Spine.

A, A portion of the firſt vertebra, and the proceſſus dentatus of the ſecond.—B, B, Covering of the ſpinal marrow produced from the dura mater, continued from the foramen magnum of the occipital bone to the middle of the os ſacrum.—C, A ligament continued from the ſpinal marrow to the os coccygis.—D, Section of the ſpinal marrow at its origin. On each ſide of the ſpinal marrow are ſeen, the thirty pair of ſpinal nerves with their ganglia, alſo covered with the dura mater.

FIG. 13. From Haller.

Gives a Poſterior View of part of the Medulla Oblongata, and the whole of the Spinal Marrow produced from it, lying in its natural ſituation within the ſheath of the Vertebræ, which is concealed by the Dura Mater being laid open longitudinally and pinned back.

A, A, Portions of the os petroſum and os occipitis, covered with the dura mater.—B, Vermiform proceſs of the cerebellum.—C, C, Part of the medulla oblongata.—D, Calamus ſcriptorius in the bottom of the fourth ventricle.—E, The ſpinal marrow;—F, Its under end terminating in two little eminences, which ſend off no nerves.—G, A ligament running from the under end of the ſpinal marrow, through the dura mater, to be fixed to the os coccygis. It is raiſed upon pins, and is that which has been conſidered by many authors as the *Fortieth pair of nerves.*—H, H, H, The dura mater cut and pinned back.—I, I, The ſeventh pair of nerves.—K, K, The eighth pair.—L, L, The nervus acceſſorius, ariſing by different roots from the upper end of the ſpinal marrow.—M, M, The ninth pair of nerves.—N, Upper end of the ligamentum denticulatum of this ſide, adhering to the dura mater.—In the interſtices of the ſpinal nerves, the teeth of this ligament are ſeen inſerted into the dura mater, as far as the under end of the ſpinal marrow.—O, The under part of the ſpinal marrow, ſending off the nerves, which form the Cauda Equina.—P, P, P, P, P, P, Poſterior origins of the thirty pair of ſpinal nerves, and their ſituation within the dura mater, together with the appearance of the filaments which form them.

FIG. 14. From Haller.

Repreſents a Portion of the Spinal Marrow, taken from the Upper Part of the Back,—viewed anteriorly.

A, Ligament produced from the pia mater, inſerted into the medullary ſubſtance.—B, B, The anterior origins of the ſpinal nerves, formed of bundles of filaments.—C, Section of the ſpinal marrow, ſhewing the medullary circumference, and crucial figure of the cineritious centre.

IG. 1.

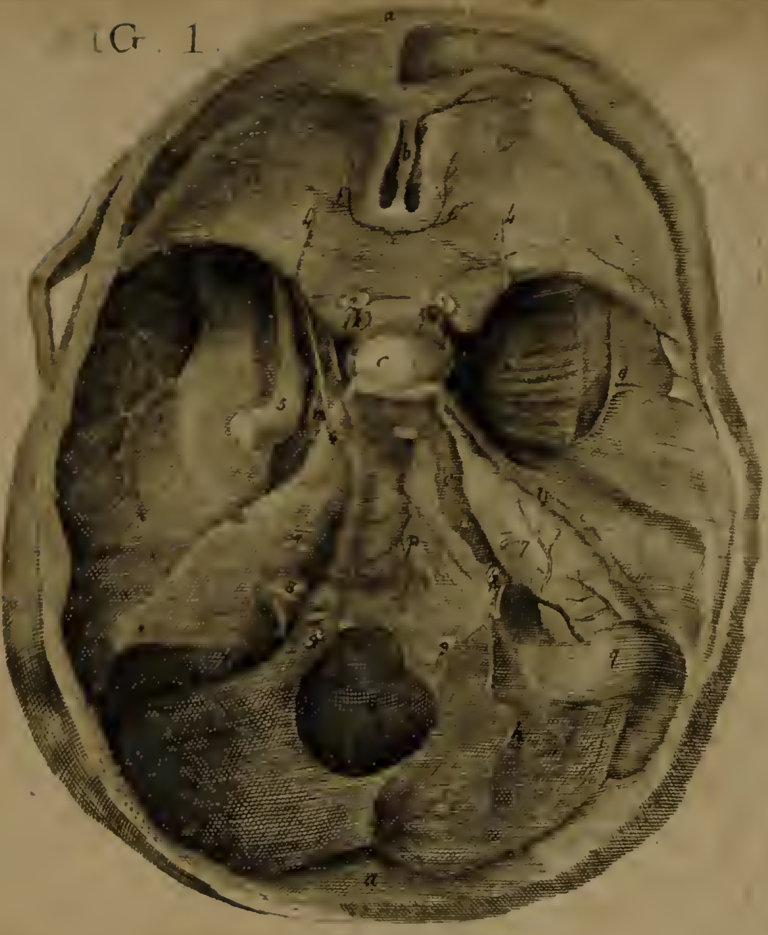


FIG. 2.

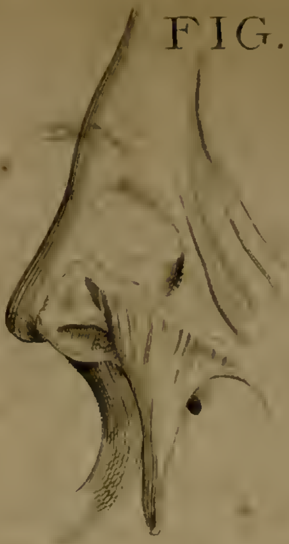


FIG. 3.

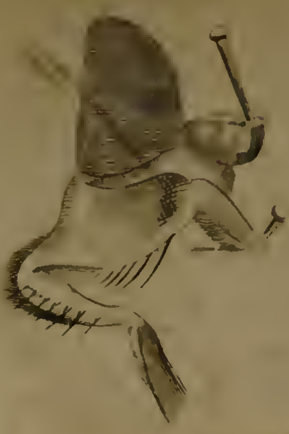


FIG. 4.

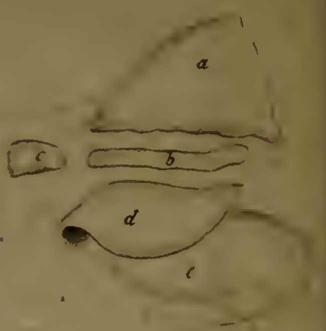


FIG. 5.

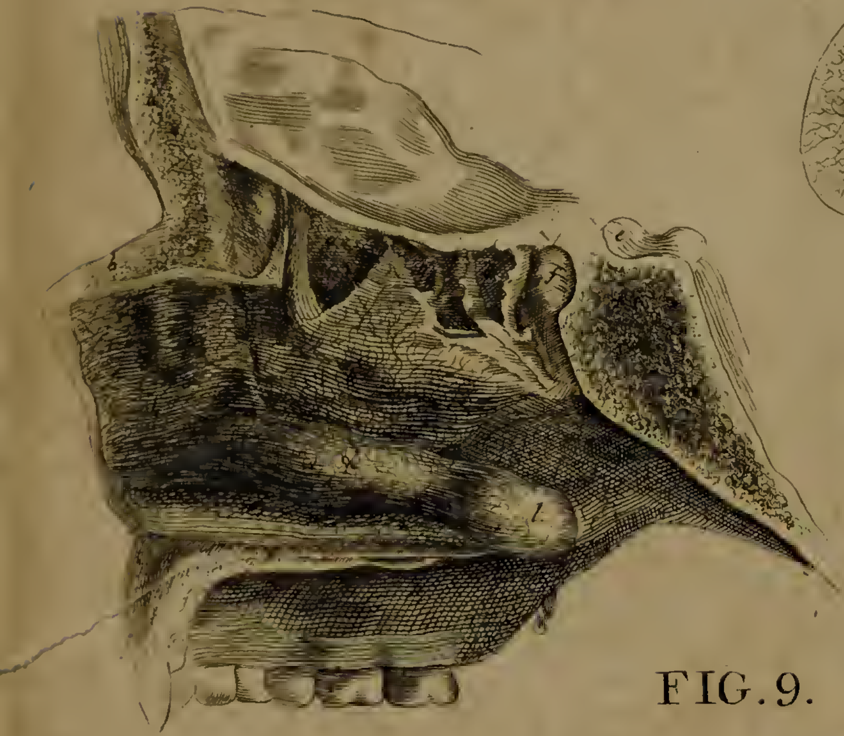


FIG. 6.

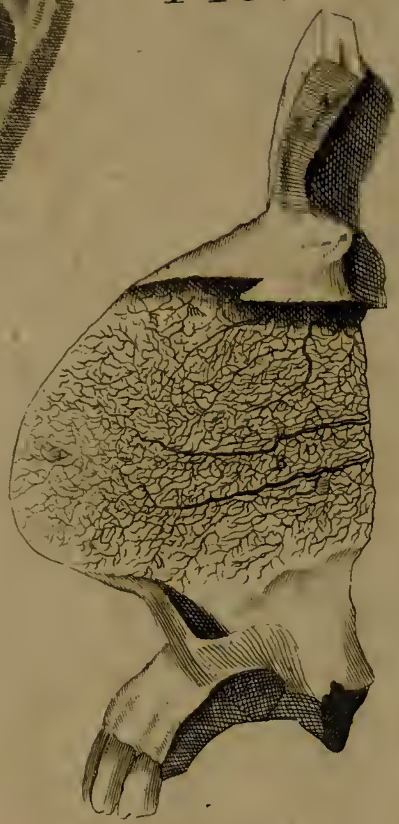


FIG. 7.

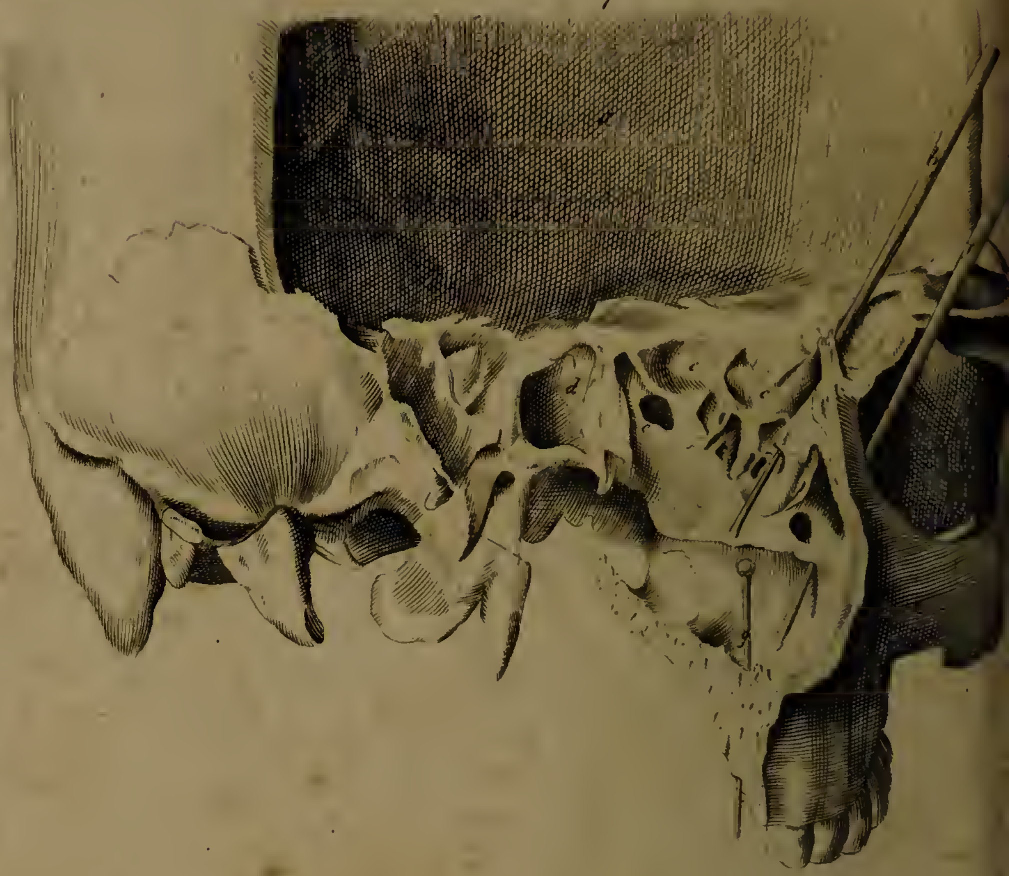


FIG. 8.

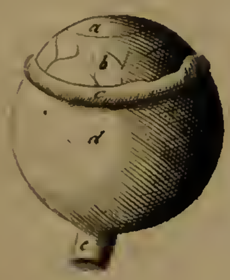


FIG. 9.

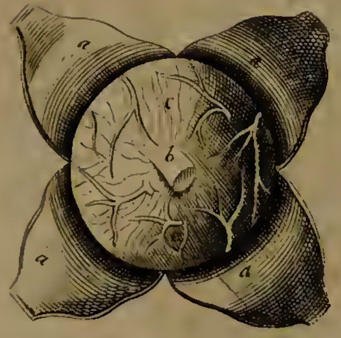


FIG. 10

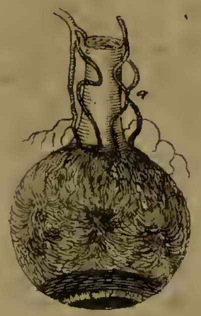


FIG. 11.

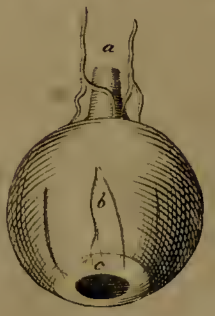


FIG. 12

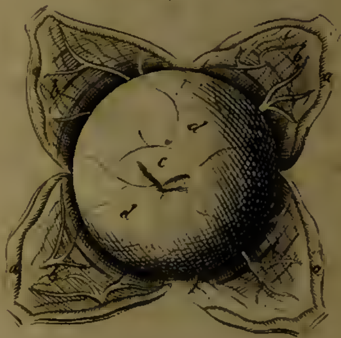


FIG. 13.

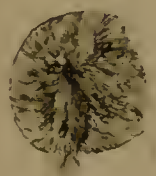


FIG. 14.

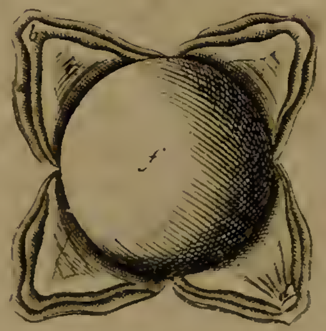


FIG. 15.

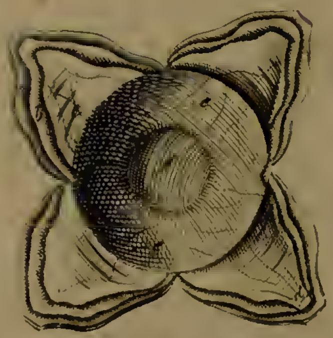


FIG. 16.

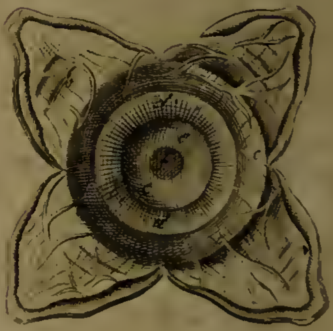


FIG. 17.

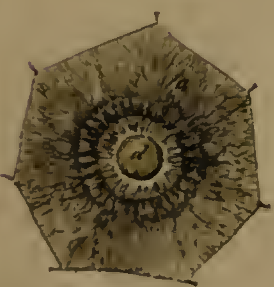


FIG. 18.

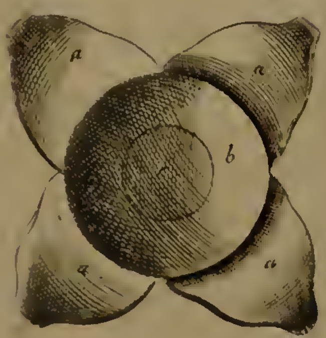


FIG. 19.

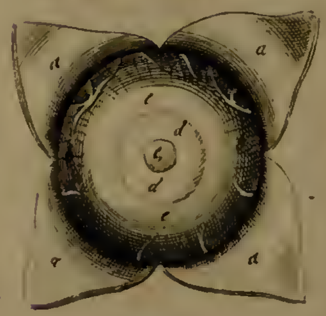


FIG. 20.

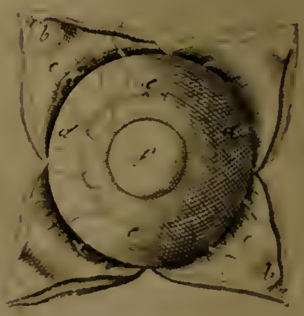


FIG. 21.

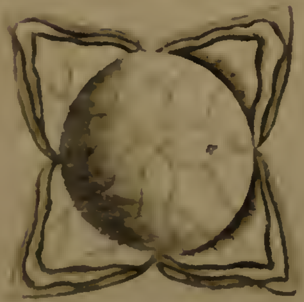


FIG. 22.

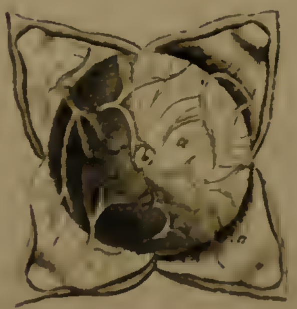


FIG. 23.

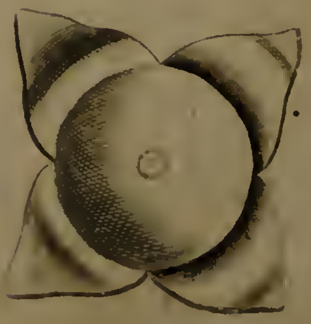


FIG. 24.

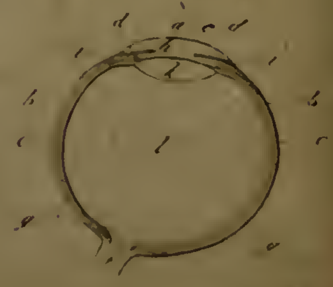


TABLE XV.

Represents the Course of the Vessels and Nerves in the Base of the Cranium; with different Views of the Principal Parts of the Nose, and of the Eye.

FIG. 1. From Ridley.

Repreſents the Inſide of the Base of the Cranium, lined with the Dura Mater, and the Course of the Arteries, Veins, and Nerves;—the Sinuſes are injected.

a, a, The cut edge of the ſkull.—*b,* The criſta Galli.—*c,* The infundibulum inſerted into the glandula pituitaria.—*d,* Foramen magnum of the occipital bone.—*e,* The zygoma.—*f,* The anterior arteries of the dura mater.—*g, g,* The middle and principal arteries of the dura mater.—*h,* One of the poſterior arteries of the dura mater.—*i, i,* The trunks of the internal carotid arteries.—*k, k,* A ſection of the internal carotid arteries, where they go to the brain.—*l, l,* The circular ſinus of Ridley.—*m,* The left cavernous ſinus, laid open.—*n, n,* The ſuperior petroſal ſinuſes.—*o, o,* The inferior petroſal ſinuſes.—*p,* Veins paſſing into the inferior petroſal ſinuſes.—*q, q,* —The lateral ſinuſes.—1. 1. The paſſage of the firſt pair of nerves.—2. 2. A ſection of the optic nerves.—3. The left part of the third pair of nerves.—4. 4. The fourth pair, turned forwards.—5. 5. The fifth pair, in its natural ſituation on one ſide, and turned outwards on the other.—6. 6. The ſixth pair.—*r,* The upper end of the great ſympathetic nerve, connected in this Figure with the fifth and ſixth pairs—7. 7. The ſeventh pair.—8. 8. The eighth,—9. 9. The ninth pair.

FIG. 2. From Drake.

A View of the Left Side of the Noſe, with the Muſculus Levator Labii Superioris Alæque Naſi, one part of which is turned down.

FIG. 3. From Drake.

Shews the Cartilages of the Noſe, viewed on the Left Side. Part of the Muſcles connected with the Cartilages of the Noſe are pinned out.

FIG. 4. From Ruysch.

A View from the Left Side, of the Cartilages which form the Under Part of the Nose.

a, The firſt or upper cartilage.—*b,* The ſecond,—*c,* The third,—*d,* The fourth cartilage.—*e,* The membranous part of one of the alæ naſi.

FIG. 5. From Drake.

Right Portion of the Upper Jaw, and Fore-part of the Base of the Cranium, divided from the Septum Narium, and viewed from the Left Side.

a, The os frontis.—*b,* The os naſi.—*c,* The oſſeous palate.—*d,* The cuneiform proceſs of the occipital bone, united with the back-part of the os ſphenoides.—*e,* The ſella turcica.—*f,* The ſphenoidal ſinus.—*g, g, g,* Œthmoid cells, which, with the other parts of the noſtril, are lined with the mucous membrane.—*h,* The fore-part of the noſtril.—*i,* The os ſpongioſum ſuperius.—*k,* The os ſpongioſum inferius.—*l,* A glandular body reſembling the uvula.

FIG. 6. From Ruysch.

The Left Side of the Septum Narium, with its Mucous Covering, and ſmall Arteries, which are much more numerous than could here be repreſented.

A, Part of the os frontis.—B, The ſeptum, with its numberleſs arteries.

FIG. 7.

A Section of the Cranium and Upper Jaw, to ſhew ſome of the Passages which terminate in the Nose.

a, The cavity of the cranium.—*b,* A probe introduced from the cavity of the left frontal ſinus, into the correſponding noſtril.—*c, c, c,* The œthmoidal cells.—*d,* The ſphenoidal ſinus of the right ſide.—*e,* A paſſage by which this ſinus opens into the right noſtril.—*f,* A probe paſſed from the left lacrymal groove into the cavity of the left noſtril.—*g,* A probe paſſed through the foramen inciſivum into the mouth.

FIG. 8. From Eustachius.

Repreſents the Ball of the Right Eye, ſeen on the Upper Part.

a, The cornea.—*b,* The tunica adnata, with its veſſels.—*c,* The tunica adnata, cut from the eye-lids, which are lined on the inner ſide by this coat reflected from the ball.—*d,* The tunica ſclerotica.—*e,* The optic nerve.

FIG. 9. From Eustachius.

Poſterior View of the Globe of the Eye.

a, a, a, a, The tunica ſclerotica diſſected round the optic nerve, and then cut into four parts, as far as the middle of the ball, and the angles turned aſide.—*b,* The optic nerve, cut off.—*c, c,* The choroid coat and its veſſels, which, as well as the veſſels in the other Figures taken from this Author, are rudely expreſſed.

FIG. 10. From Ruysch.

Shews the Tunica Choroides, the Tunica Adnata and Sclerotica being removed, from a Boy of ſix or ſeven years of Age.

a, The ocular arteries, various branches of which go to the bottom of the tunica choroides, and various others to the middle of it.—*b,* The ciliary ligament.—*c,* The iris.—*d,* The pupil.

FIG. 11. From Ruysch.

The Choroid Coat, the Sclerotic being removed, and the Arteries left out to ſhew the Ciliary Nerves.

a, The ciliary nerves.—*b,* Their continuation upon the choroid coat.—*c,* The iris, upon which the ciliary nerves terminate.

FIG. 12. From Eustachius.

The ſame Ball with that repreſented in Figure 9. alſo viewed poſteriorly. The Sclerotic and Choroid Coats are cut, and turned back.

a, a, a, a, The ſclerotic coat, turned back.—*b, b, b, b,* The choroid coat, alſo cut and turned back.—*c,* Section of the optic nerve near the ball.—*d, d,* The retina, with its blood-veſſels.

FIG. 13. From Ruysch.

Shews the Tunica Ruyshiana, or Inner Layer of the Choroid Coat, from the Centre of which a portion of the Retina depends.

a, A large portion of the tunica Ruyſchiana.—*b,* Depending portion of the retina, going from the bottom of the eye.—*c,* Myriads of ſmall arteries diſperſed over the tunica Ruyſchiana, emerging from the bottom of the eye, and running in a direction different from thoſe of the tunica choroides.

FIG. 14. From Eustachius.

Another Poſterior View of the ſame Ball, (Figure 9.), the Tunica Sclerotica, Choroides, and alſo the Retina of which are diſſected, and turned back in the ſame manner.

a, b, c, The reclined angles of the tunica ſclerotica, choroides,

roides, and retina; the other angles are turned back in the ſame manner.—*d*, The extremity of the optic nerve adhering to one of the angles of the retina.—*f*, The vitreous humour.

FIG. 15. From Eustachius.

The ſame part of the ſame Ball, the ſame Coats diſſected, and turned back, but the Vitreous Humour removed.

a, *b*, *c*, *d*, As in the preceding Figure.—*e*, *e*, The anterior part of the retina entire, extending to—*f*, The cryſtalline lens.

FIG. 16. From Eustachius.

The ſame Ball, diſſected and opened as above; but beſides the Vitreous Humour, the Cryſtalline Lens and Retina are alſo removed.

a, *b*, As above.—*c*, *c*, Anterior part of the choroid coat.—*d*, *d*, The ciliary proceſſes.—*e*, *e*, The iris.—*f*, The pupil.

FIG. 17. From Ruysch.

The Anterior Surface of the Tunica Ruyschiana expanded, with the Ligamentum Ciliare, and its Processes.

a, Poſterior ſurface of the tunica Ruyſchiana, covered with ſmall arteries.—*b*, Ciliary proceſſes.—*c*, The iris.—*d*, The pupil.

FIG. 18. From Eustachius.

The ſame Ball with Figure 16. diſſected in the ſame part and manner, and laid open; but conſiſting only of the Sclerotica and Cornea; the Humours being entirely removed.

a, *a*, *a*, *a*, The ſclerotic coat diſſected, and its angles turned back.—*b*, *b*, The anterior part of the ſclerotica, entire.—*c*, The cornea.

FIG. 19. From Eustachius.

The ſame Ball, viewed anteriorly. The Cornea, with the ſclerotica, are diſſected into four parts, from the middle of the Cornea to the middle of the Ball, and the Angles turned back.

a, *a*, *a*, *a*, The reflected angles of the cornea and ſclerotica.—*b*, *b*, The tunica choroides, and its blood-veſſels.—*c*, The ciliary circle.—*d*, The iris.—*e*, The pupil.

FIG. 20. From Eustachius.

The ſame Ball opened on the Anterior Part, in a ſimilar manner, but the Sclerotica and Choroides alſo diſſected, and turned back.

a, *a*, *b*, *c*, The reflected angles of the ſclerotica and choroides.—*d*, *d*, The retina, with its veſſels.—*e*, *e*, Veſtiges of the ciliary proceſſes.—*f*, The cryſtalline lens.

FIG. 21. From Eustachius.

The ſame as the former, but along with the Sclerotica and Choroides, the Retina alſo is diſſected, and turned back, and the Cryſtalline Lens and Vitreous Humour removed, to ſhew,

a a, The poſterior part of the retina, with its veſſels.

FIG. 22. From Eustachius.

The ſame as the former, but the Retina alſo removed, to ſhew

a a, The choroides, with its blood-veſſels, rudely expreſſed.—*b*, The entry of the optic nerve.

FIG. 23. From Eustachius.

The ſame Ball. It conſiſts of the Sclerotica and Cornea only, the other parts being removed.

FIG. 24.

An Horizontal Section of the Eye-Ball, ſhewing the ſituation of its Coats and Humours.

a, The cornea.—*b*, The ſclerotic coat.—*c*, The choroid coat.—*d*, The iris.—*e*, The pupil.—*f*, The optic nerve.—*g*, The retina.—*h*, The anterior, and—*i*, *i*, The poſterior chambers in which the aqueous humour is lodged.—*k*, The cryſtalline lens.—*l*, The vitreous humour.

TAB XVI

FIG. 1.

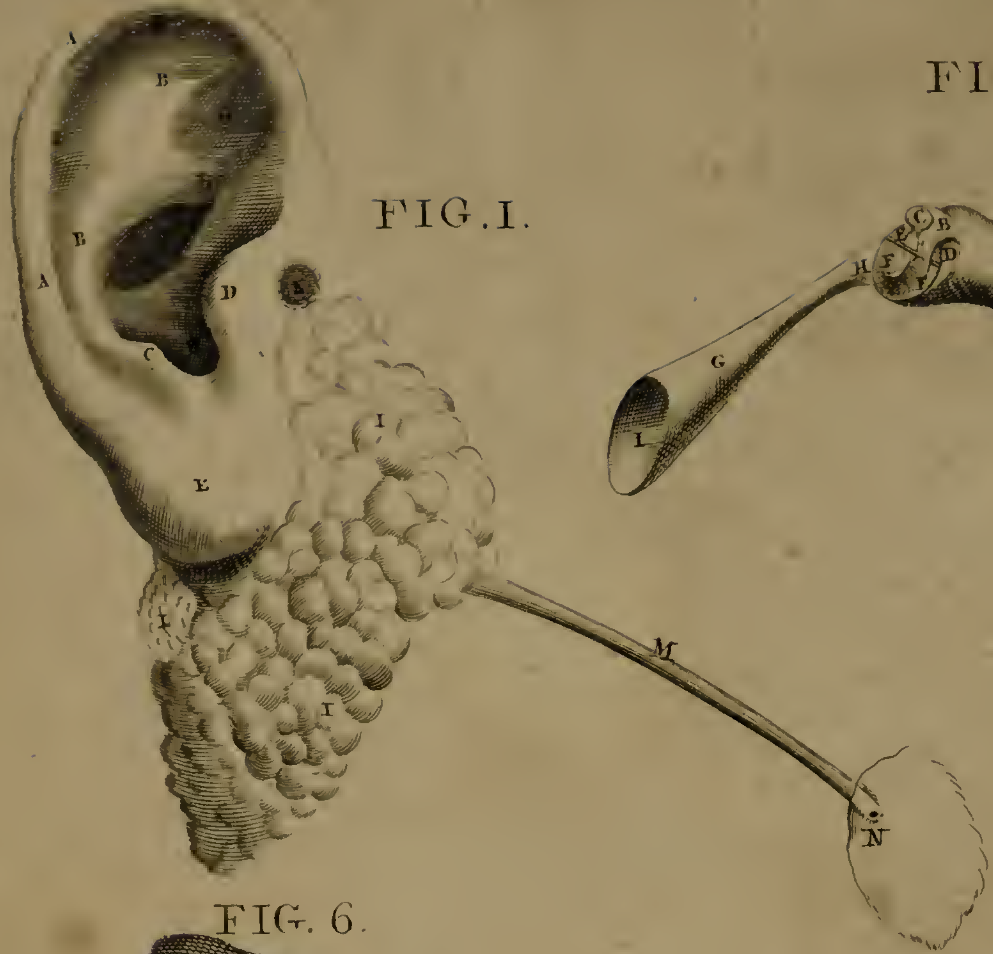


FIG. 2.

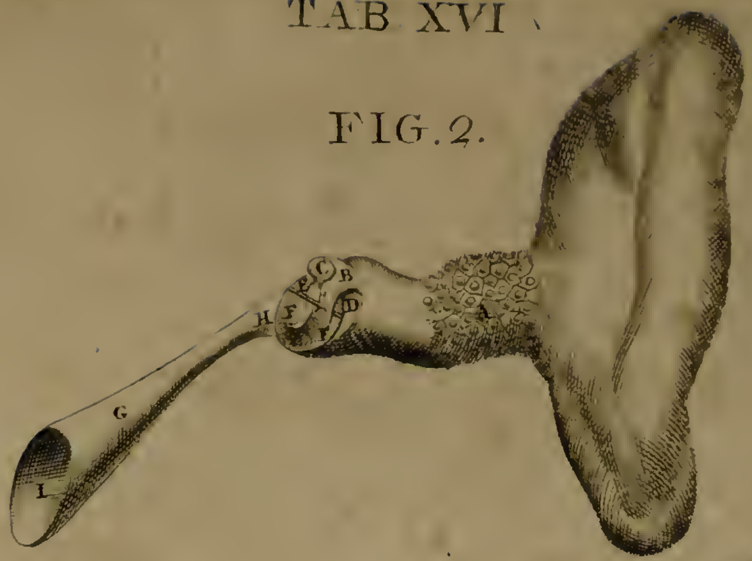


FIG. 3.

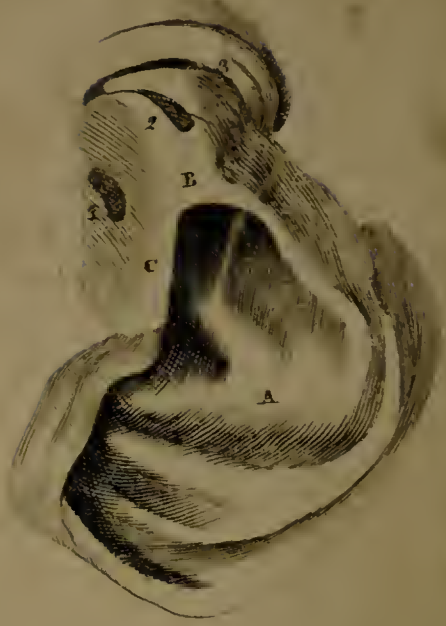


FIG. 4.

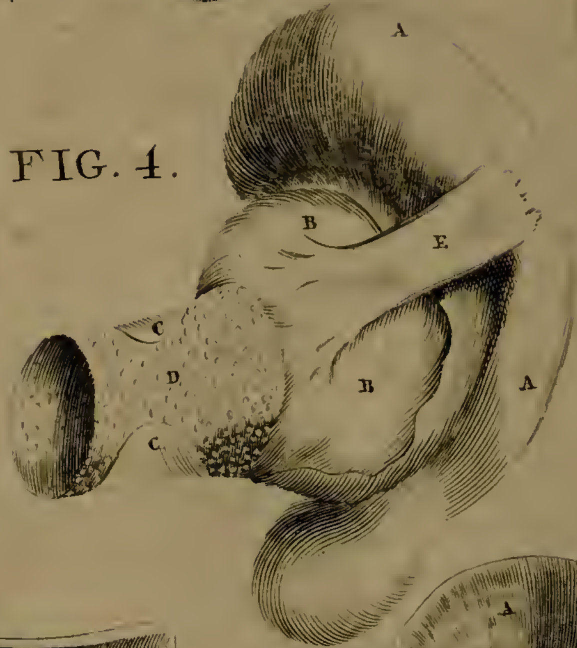


FIG. 5.

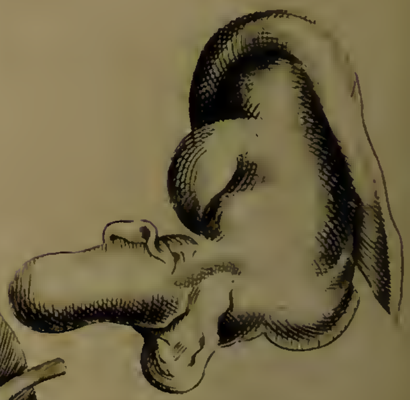


FIG. 6.

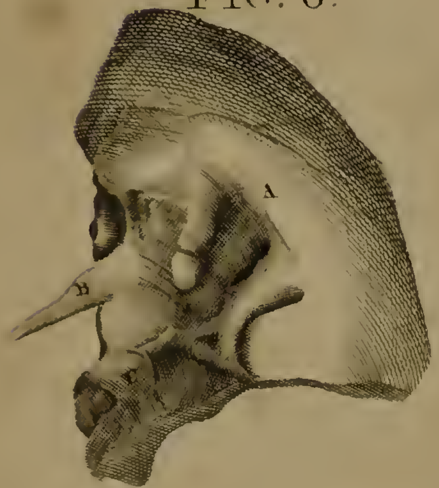


FIG. 7.

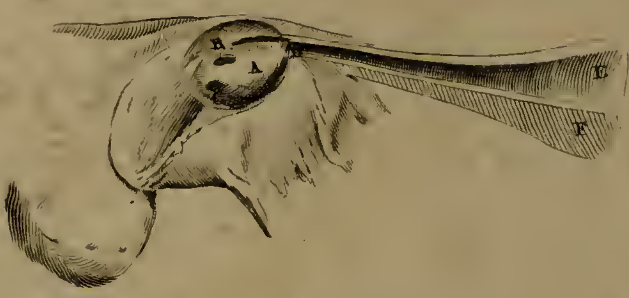


FIG. 8.

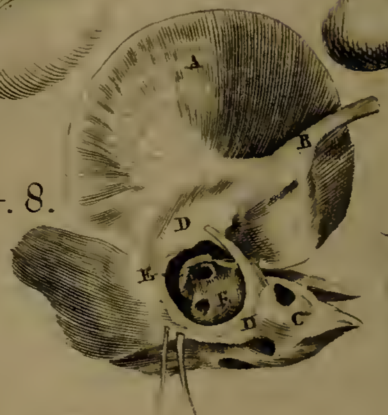


FIG. 9.

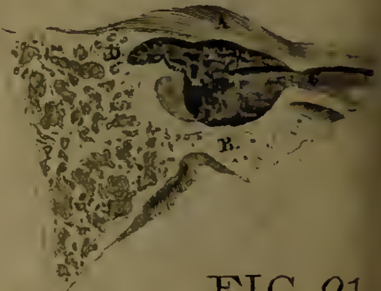


FIG. 10.

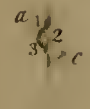


FIG. 11.

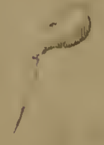


FIG. 12.

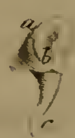


FIG. 13.

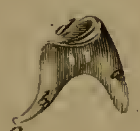


FIG. 14.

FIG. 15.

FIG. 16.

FIG. 17.

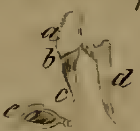


FIG. 18.

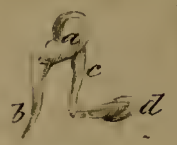


FIG. 19.

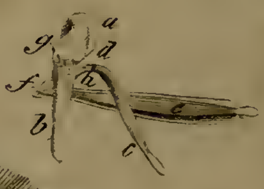


FIG. 20.

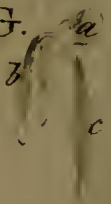


FIG. 21.

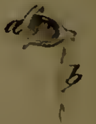


FIG. 22.

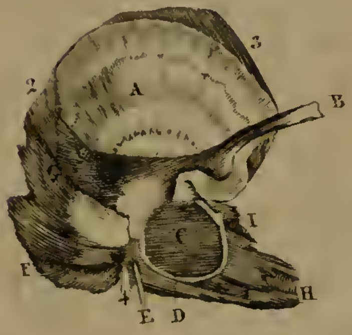


FIG. 23.

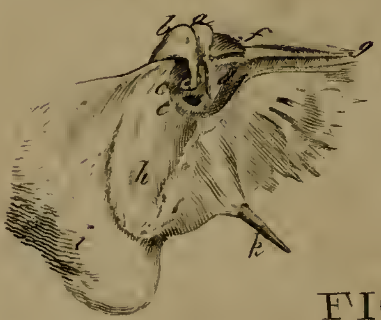


FIG. 24.

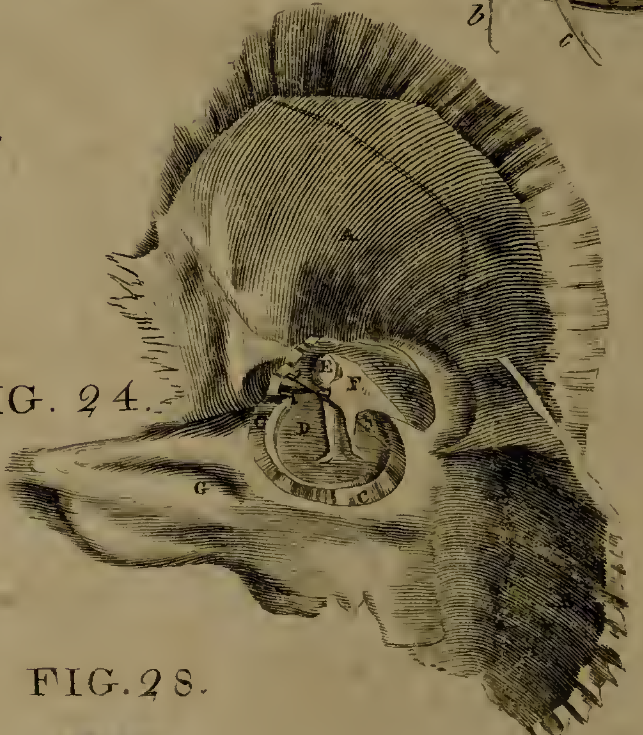


FIG. 25.

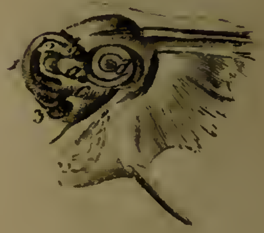


FIG. 26.

FIG. 27.

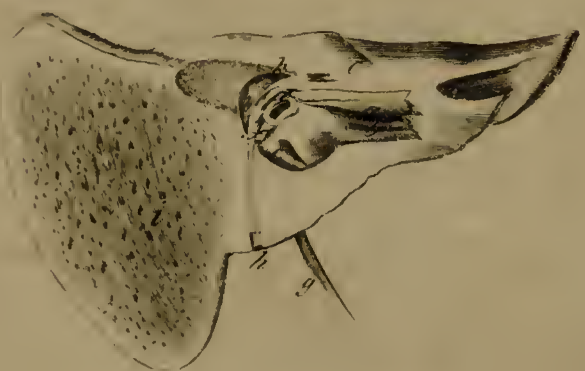


FIG. 28.

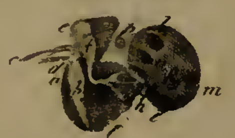


FIG. 29.

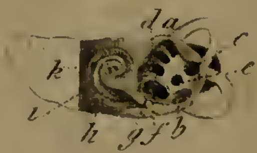


FIG. 30.

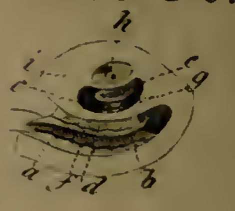


FIG. 31.

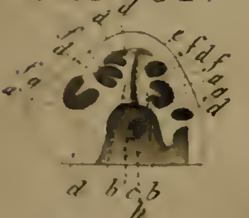


FIG. 32.

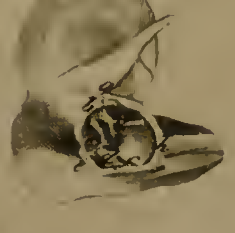


FIG. 33.

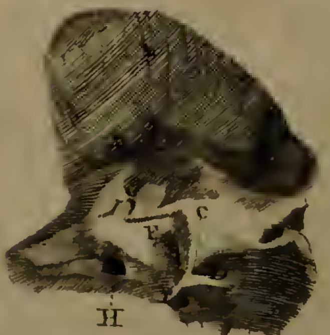


FIG. 34.

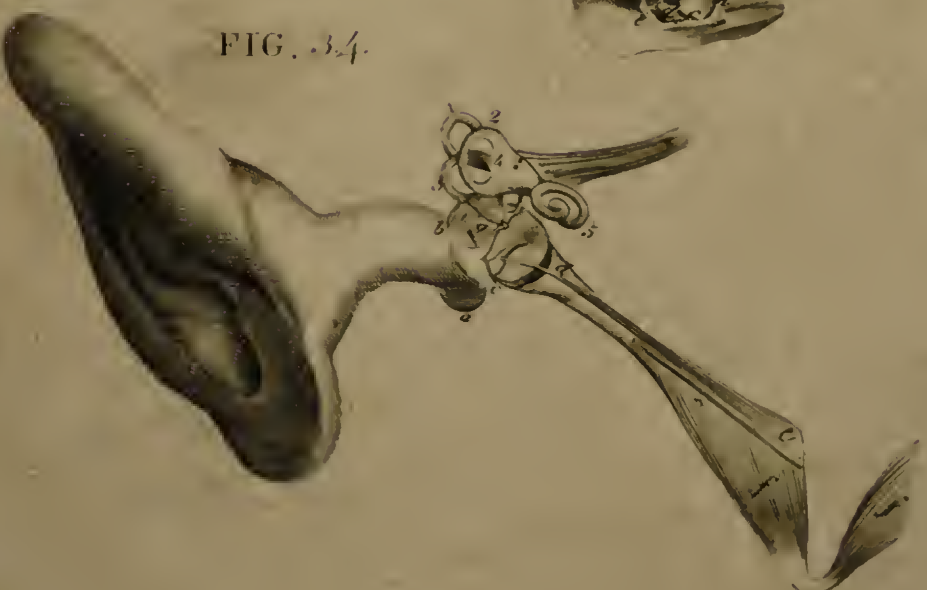


FIG. 35.

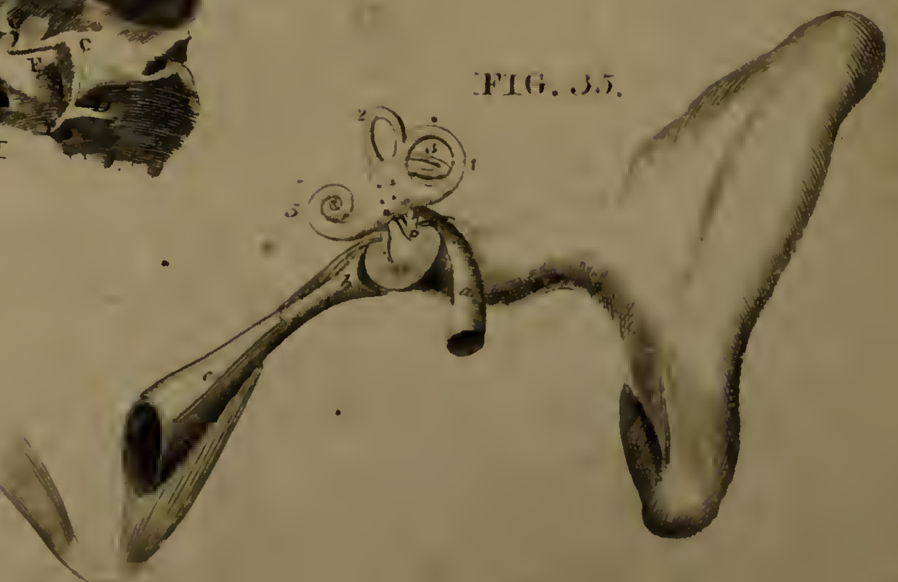


TABLE XVI.

Shews the different Parts of the Organ of Hearing.

Fig. 1. From Valsalva.

Repreſents the External Ear, with the Parotid Gland and its Duct.

A, A, The helix.—B, B, B, Anthelix.—C, Antitragus.—D, Tragus.—E, Lobe of the ear.—F, F, Cavitas innominata.—G, Scapha.—H, H, The concha, divided into two cavities by an intermediate projection.—I, I, Parotid gland.—K, L, Lymphatic glands.—M, Duct of the parotid gland.—N, Orifice of the duct, opening into the cavity of the mouth.

Fig. 2. From Valsalva.

Gives a View of the Poſterior part of the External Ear, the Meatus Externus, the Tympanum, with its ſmall Bones, and the Euſtachian Tube of the Right Side.

A, Glands of the meatus auditorius, with its reticular ſubſtance.—B, The incus.—C, The malleus.—D, The oſſeous portion of the wall of the maſtoid ſinuoſity, to which the ſhort proceſs of the incus is joined.—E, The chorda tympani.—F, Membrana tympani.—G, The cavity of the Euſtachian tube.—H, Origin of the tube;—I, Its termination.

FIG. 3. From Du Verney.

The Cartilage of the Ear, and the Cartilaginous part of the Meatus Externus ſtripped of their coverings.

A, The cartilages of the ear, with its windings.—B, The cartilaginous paſſage, ſomewhat flattened.—C, That part of the cartilage which forms the beginning of the meatus.—1. 2. 3. The three fiſſures of the cartilaginous paſſage.

FIG. 4. From Du Verney.

The Back-part of the Ear, and the Upper-part of the Cartilaginous Passage, with the Ligament which ties the Concha to the Temporal Bone.

A, A, The back-part of the ear.—B, B, The back-part of the concha, diveſted of the ſkin.—C, C, The appendices which terminate the cartilage in the upper part.—D, The ſuperior part of the paſſage, which is formed of a glandular membrane.—E, The ligament of the ear reverſed.

FIG. 5. Ephemerid. Germ.

Repreſents the Back-part of the Ear, the Parts which connect it to the Head, and the Membrane which lines the Meatus Externus.

FIG. 6.

The Connection between the Meatus Externus and Temporal Bone, after the Outer Ear has been removed.

A, The temporal bone.—B, The ſtyloid proceſs.—C, The meatus externus.

FIG. 7. From Du Verney.

A Section of the Temporal Bone, to ſhew the Tympanum and the Eustachian Tube.

A, The tympanum.—B, The feneſtra ovalis, and—C, The feneſtra rotunda, leading from the tympanum to the labyrinth.—D, The oſſeous part of the Euſtachian Tube;—E, Its cartilaginous extremity;—F, Its membranous part, turned back.

FIG. 8. From Cassebohm.

Repreſents the Outer part of the Temporal Bone of a Fœtus

A, The ſquamous part.—B, The zygomatic proceſs.—C, The pars petroſa.—D, D, The bony ring which receives the membrana tympani.—E, Feneſtra ovalis.—F, Feneſtra rotunda.

FIG. 9. From Du Verney.

Repreſents the Temporal Bone, cut perpendicularly downwards, in ſuch a way as to ſhew the depth of the Tympanum, and the Veſſels ſpread out upon the Membrane which lines it, together with the Cells of the Maſtoid Proceſs.

A, B, The tympanum.—C, The poſterior extremity of the Euſtachian tube.—D, An opening from the cells of the maſtoid proceſs.

FIG. 10. From Du Verney.

The Malleus, with the Eminences and Cavity which ſerve for its Articulation.

a, Its head;—*b*, Its handle;—*c*, Its large proceſs;—1. Its firſt eminence;—2. Its ſecond eminence;—3. The cavity between the two eminences.

FIG. 11. From Du Verney.

A View of the oppoſite ſide of the ſame Malleus with that of Figure 10.

FIG. 12. From Du Verney.

The Incus, viewed on the ſide by which it is articulated with the Malleus.

a, The body of the incus, with the eminences and cavity for articulation.—*b*, The ſhort branch, fore-ſhortened.—*c*, The long branch.

FIG. 13. From Du Verney.

A Lateral View of the Incus.

a, The ſhort,—*b*, The long proceſs.—*c*, The os orbiculare adhering to the long proceſs.—*d*, The cavity for articulation with the malleus.

FIG. 14. From Du Verney.

The Under End of the Incus, with the Os Orbiculare and Head of the Stapes.

a, The long proceſs of the incus.—*b*, Os orbiculare.—*c*, Head of the ſtapes.

FIG. 15. From Du Verney.

Shews the Baſe, Crura, and Head of the Stapes.

FIG. 16. From Du Verney.

Baſe of the ſtapes, inverted to ſhew its hollow cavity.

FIG. 17. From Du Verney.

Small Bones of the Ear, articulated with each other, and viewed Poſteriorly.

a, The body of the incus;—*b*, Its ſhort branch, ſeen in front;—*c*, Its long branch, articulated with the ſtapes, by the intervention of the os orbiculare.—*d*, Handle of the malleus.—*e*, The baſe of the ſtapes.

FIG. 18. From Du Verney.

The Small Bones of the Ear, viewed Anteriorly.

a, The head of the malleus;—*b*, Its handle.—*c*, The long branch of the incus.—*d*, The baſe of the ſtapes.

FIG. 19. From Du Verney.

A View of the Fore-part of the Malleus and its Muscles.

a, The head of the malleus;—*b*, Its handle.—*c*, The external muſcle of the malleus;—*d*, Its inſertion.—*e*, The internal muſcle, with its ſheath opened.—*f*, The curvature of the internal muſcle, before its inſertion into the handle of the malleus.—*g*, The large proceſs of the malleus.—*h*, The ſmall proceſs, into which the external muſcle is fixed.

FIG. 20. From Du Verney.

The Malleus, with its two Muscles, the Eye being ſuppoſed to be placed in the Euſtachian Tube.

a, The malleus.—*b*, The external muſcle of the malleus.—*c*, The internal muſcle.

FIG. 21. From Du Verney.

The Stapes, with its Muscle.

a, The ſtapes;—*b*, Its muſcle.

FIG. 22. From Du Verney.

Repreſents the Fore-part of the Temporal Bone of a Fœtus.

A, The ſquamous proceſs, the ſmall bony fibres of which are eaſily diſtinguiſhed.—2. 3. The ſides of its circumference, which are yet cartilaginous.—B, The zygomatic proceſs.—C, The membrana tympani.—D, The bony ring which receives the membrana tympani.—E, The ſtyloid proceſs, as yet cartilaginous.—F, The maſtoid proceſs, very ſmall.—4. The foramen, through which the portio dura paſſes out.—G, This letter marks an obſcure line, which is the part where the ſquamous, is ſeparated from the maſtoid proceſs. Theſe two bony parts are firmly united in adults.—H, The canal which incloſes the internal carotid.—I, The foramen where the tube which goes from the ear to the palate is connected.

FIG. 23. From Du Verney.

Repreſents the Temporal Bone, from which the Squamous parts and Membrana Tympani are cut off, and as much of the Body of the Bone as is neceſſary to give a view of the Tympanum and Small Bones of the Ear.

a, The

TABLE XVI. CONTINUED.

a, The malleus.—*b*, The incus.—*c*, The ſtapes fore-ſhortened, with its baſe filling up the feneſtra ovalis.—*d*, The bottom of the tympanum, formed by the pars petroſa.—*e*, The feneſtra rotunda.—*f*, The ſemi-canal which incloſes the interal muſcle of the malleus.—*g*, The Euſtachian tube.—*h*, Section of the meatus externus.—*i*, The maſtoid proceſs.—*k*, The ſtyloid proceſs.

FIG. 24. From Du Verney.

Repreſents the Inner Side of the Trmporal Bone, with as much of it cut off as was neceſſary to ſhew the Membrana Tympani, upon which the Malleus and Incus are ſeen, with the nerve called Chorda Tympani, and the Tendon of the External Muſcle of the Malleus;—all of them in ſitu.

A, The ſquamous plate of the temporal bone.—B, The maſtoid proceſs.—C, C, A ſection of the os petroſum.—D, Membrana tympani.—E, The malleus.—F, The incus, with its ſhort branch reſting upon the entrance of the paſſage into the cells of the maſtoid proceſs.—G, Meatus auditorius internus.—1. Tendon of the external muſcle of the malleus.—2. 3. The chorda Tympani.

FIG. 25. From Du Verney.

The Temporal Bone, prepared ſo as to ſhew the Cochlea, Veſtibles, and Semicircular Canals in ſitu.

a, The vault of the veſtible.—*b*, The feneſtra ovalis.—*c*, The feneſtra rotunda.—*d*, The lamina ſpiralis, diveſted of the ſpiral canal which covers it, and of the membrane which connects it to the ſurface of that canal.—1. The ſuperior,—2, The middle, and—3, The inferior ſemicircular canals in ſitu. The middle and inferior are cut open to ſhew their cavities.

FIG. 26. From Du Verney.

The Covering of the Cochlea taken off, to ſhew its ſemioval Spiral Canal.

FIG. 27. From Cassebohm.

A Section of the Mastoid and Petrosal Processes, to ſhew ſeveral parts belonging to the Tympanum.

a, Canal for one of the muſcles of the malleus.—*b*, Section of the Euſtachian tube.—*c*, Section of the Aqueduct of Fallopius.—*d*, The foramen ovale.—*e*, The foramen rotundum.—*f*, The canal for the muſcle of the ſtapes.—*g*, The ſtyloid proceſs.—*h*, Foramen ſtylo-maſtoideum; the dotted lines running from it mark the canal of the portio dura of the ſeventh pair of nerves.—*i*, Cells of the maſtoid proceſs.—*k*, Maſtoid ſinus.

FIG. 28. From Cassebohm.

The Internal Ear opened tranſverſely.

a, Part of the meatus externus.—*b*, Part of the membrana tympani.—*c*, External muſcle of the malleus.—*d*, Chorda tympani.—*e*, The malleus.—*f*, The incus.—*g*, The articulation of the incus with the os orbiculare, and of the os orbiculare with the ſtapes.—*h*, The baſe of the ſtapes, fixed in the foramen ovale.—*i*, The muſcle of the ſtapes.—*k*, Orifice proper to the ſuperior ſemicircular canal.—*l*, Orifice of the interior canal.—*m*, Orifice common to the ſuperior and inferior canals.—*n*, Superior orifice of the external canal.—*o*, Inferior orifice of that canal.—*p*, Section of the Aqueduct of Fallopius.

FIG. 29. From Cassebohm.

The Vestible and Cochlea of a Child, laid open on the ſide next the Cavity of the Cranium.

a, The orifice of the ſuperior ſemicircular canal.—*b*, The orifice of the inferior canal.—*c*, Orifice common to the ſuperior and inferior canals.—*d*, Orifice of the ſuperior external canal.—*e*, Inferior orifice of that canal.—*f*, Foramen ovale,—*g*, Orifice of the ſcala veſtibuli.—*h*, Lamina ſpiralis.—*i*. Membranaceous part of the lamina ſpiralis.—*k*, The perforated part of the cochlea for the paſſage of nerves.

FIG. 30. From Cassebohm.

Repreſents a Section of the Cochlea, to ſhew its Spiral Proceſs.

a, The beginning of the ſcala tympani.—*b*, *c*, The firſt and ſecond turns of the ſcala tympani.—*d*, *e*, The firſt and ſecond turns of the ſcala veſtibuli.—*f*, *g*, The firſt and ſecond turns of the oſſeous part of the lamina ſpiralis, the membranaceous part being removed.—*h*, The extremity, or hamulus, of the lamina ſpiralis.—*i*, The part of the os petroſum which covers the cochlea.

FIG. 31. From Cassebohm.

The Cochlea cut from its Baſe to its Centre.

a, *a*, The bone which incloſes the cochlea.—*b*, *b*, The modiolus, or nucleus.—*c*, The cavity of the modiolus.—*d*, *d*, *d*, *d*, Scala tympani;—*e*, Its extremity.—*f*, *f*, *f*, *f*, Scala veſtibuli.—*g*, *g*, Lamina ſpiralis of the firſt turn, and the ſame is ſeen in the other turns of the cochlea.—*h*, Meatus auditorius internus.—*i*, Aqueduct of Fallopius.

FIG. 32. From Cassebohm.

The Temporal Bone of a Fœtus of four months, with the Small Bone of the Tympanum, in their natural ſituation.

a, The malleus.—*b*, The incus.—*c*, The os orbiculare.—*d*, The ſtapes.—*e*, The canal of the muſcle of the ſtapes.—*f*, The foramen rotundum.—*g*, The canal for the internal ~~bone of the~~ muſcle~~s~~ of the malleus.—~~*f*~~ *h*, The ring of the bone to which the membrana tympani is fixed.

FIG. 33. From Du Verney.

Back-view of the Temporal Bone of a Fœtus.

A, Pars ſquamoſa.—B, B, The part where it is ſeparated from the os petroſum.—C, Superior ſemicircular canal, ſeen without any preparation.—D, The inferior.—E, The point of their communication.—F, A conſiderable foſſa, which is ſituated under the ſuperior canal, and which is filled up and effaced as the fœtus grow olders.—G, Foramen in the paſſage of the portio dura.—H, Foramen of the auditory nerve.

FIG. 34. From Valsalva.

A view of the Anterior part of the Ear, but turned a little towards the Occiput, to obtain a more diſtinct view of the four Ossiculæ.

a, Extremity of the Fallopian Aqueduct, from which the portio dura of the auditory nerve ariſes.—*b*, The oſſeous portion from the wall of the maſtoid proceſs, to which the ſhort proceſs of the incus is fixed.—*c*, Muſcle of the proceſſus minimus of the malleus. The muſcle of the proceſſus minor oppoſite to this is not ſeen, being wholly covered by the incus, and meatus auditorius.—*d*, Muſcle of the proceſſus major, which extends the whole length of the Euſtachian tube, freed from its oſſeus canal.—*e*, Anterior ſide of the cartilage of the Euſtachian tube, into which the fleſhy fibres of the preceding muſcles are inſerted.—*f*, *f*, The new muſcle of the Euſtachian tube.—*g*, Muſcle of the ſtapes, freed from its oſſeous canal.—1. Canalis ſemicircularis major.—2. Canalis ſemicircularis minor.—3.—Minimus.—4. The veſtibulum, in the arch of which, according to this view, only two of thoſe foramina are ſeen, which tranſmit nervous twigs into the cavity of the veſtible. The three remaining foramina are ſeen in the following Figure.—5. Canal of the cochlea.—6. Portio mollis of the auditory nerves, one part of which goes to the cochlea, and the other, which is divided into five twigs, to the veſtible; of theſe twigs two are cut off, to obtain a view of the two above-mentioned foramina, through which they paſſed.

FIG. 35. From Valsalva.

The Ear viewed Poſteriorly, but turned forward to obtain a view of the Fenestra Rotunda, Membrana Tympani, and part of the Ossiculæ.

a, The Fallopian Aqueduct.—*b*, Origin of the Euſtachian tube.—*c*, Poſterior ſide of the cartilage of the ſame.—*d*, End of the tube.—1. Canalis ſemicircularis major,—2. Minor,—3. Minimus.—4. The veſtibulum, in the arch of which are ſeen three of theſe ſmall ~~lobes~~ holes, which tranſmit nervous twigs into the veſtible. Under theſe the feneſtra rotunda is ſeen.—5. Canal of the cochlea, within the windings of which is left, that ſinuoſity which is perforated with very minute holes, for the paſſage of the portio mollis. For the ſake of greater perſpicuity, the holes are ſhewn ſomewhat larger than nature. The other parts are evident from the explanation of the preceding Figure.

TAB. XVII.

FIG. I

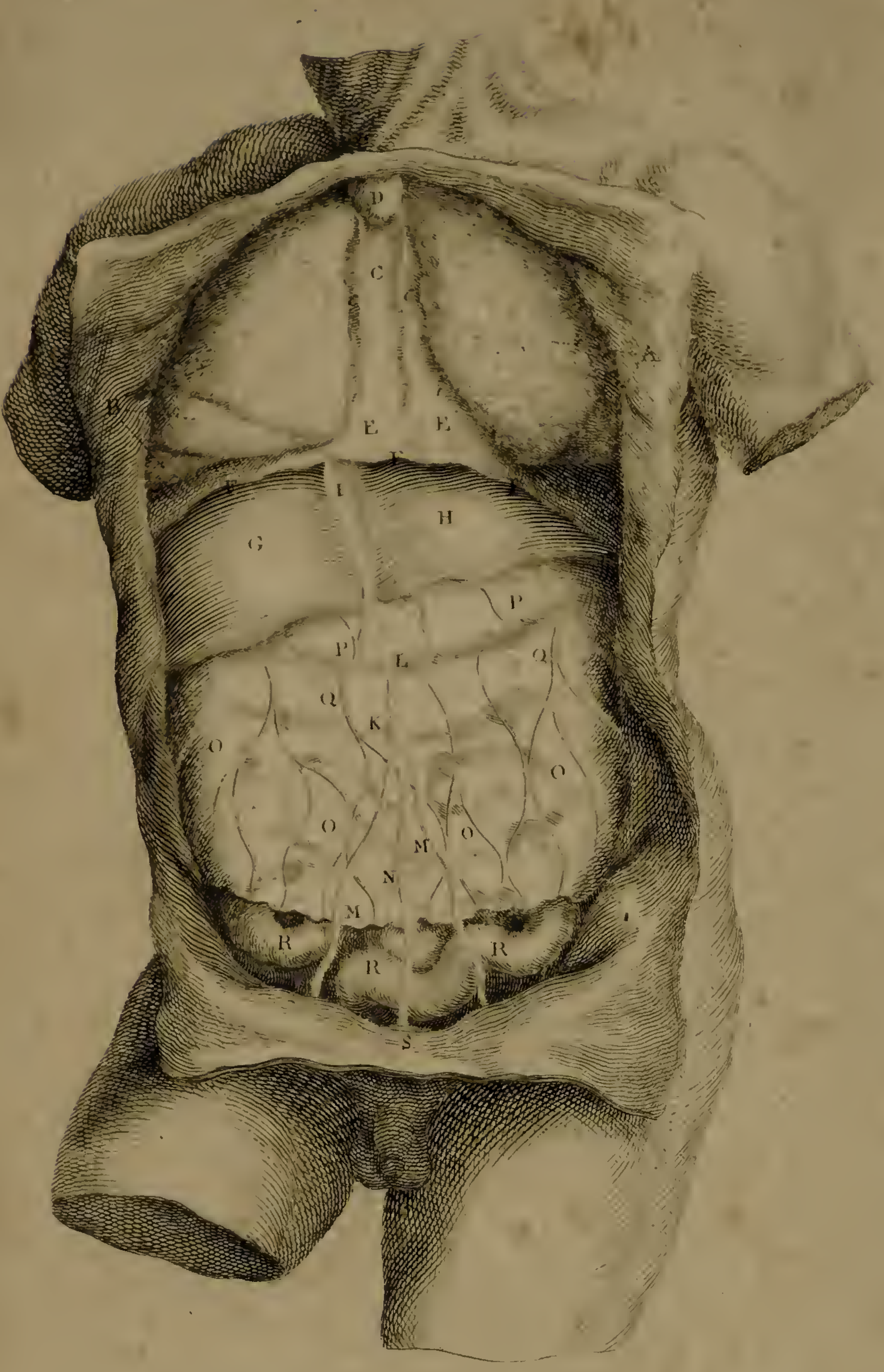


FIG. II

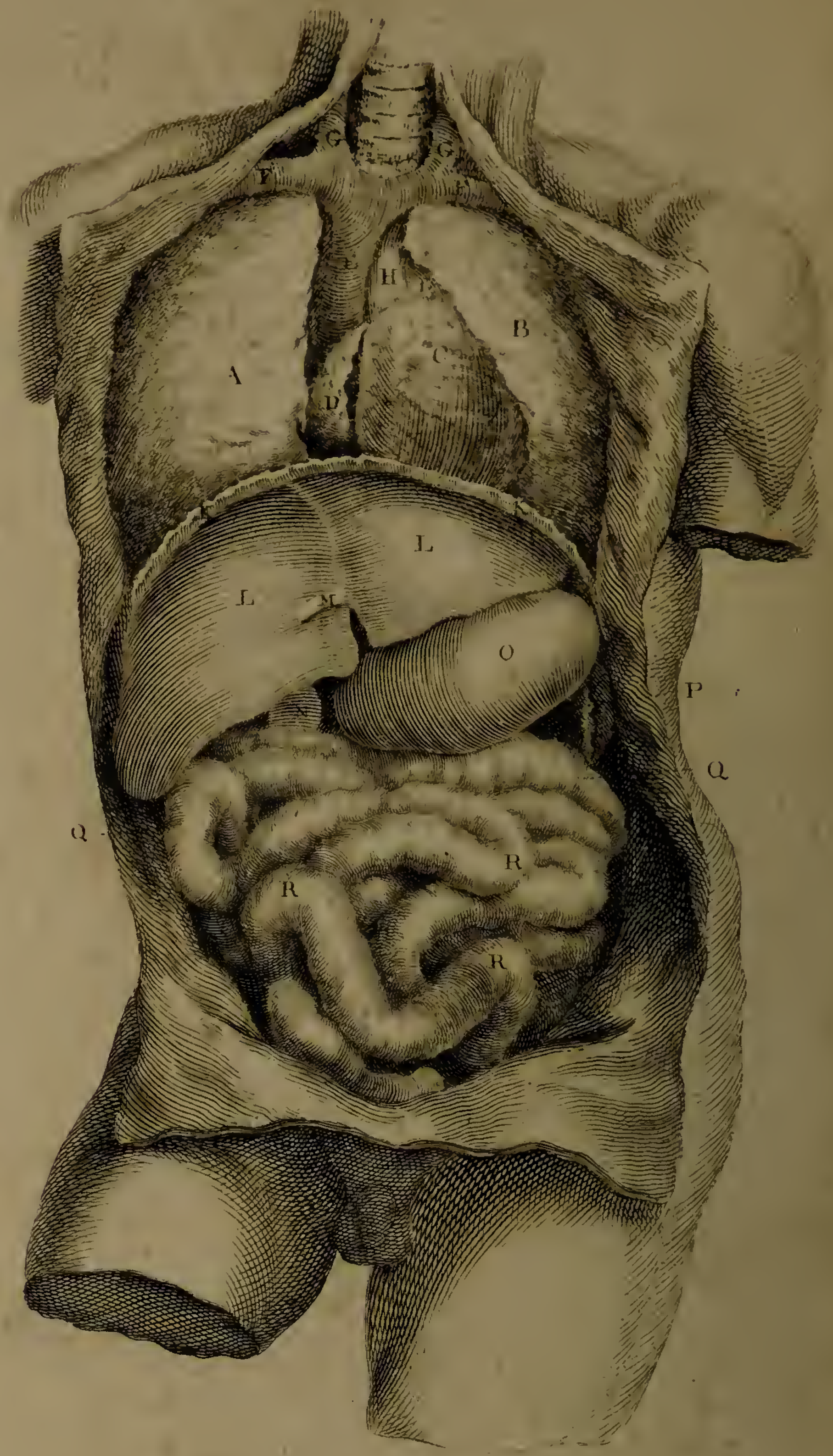


FIG. III

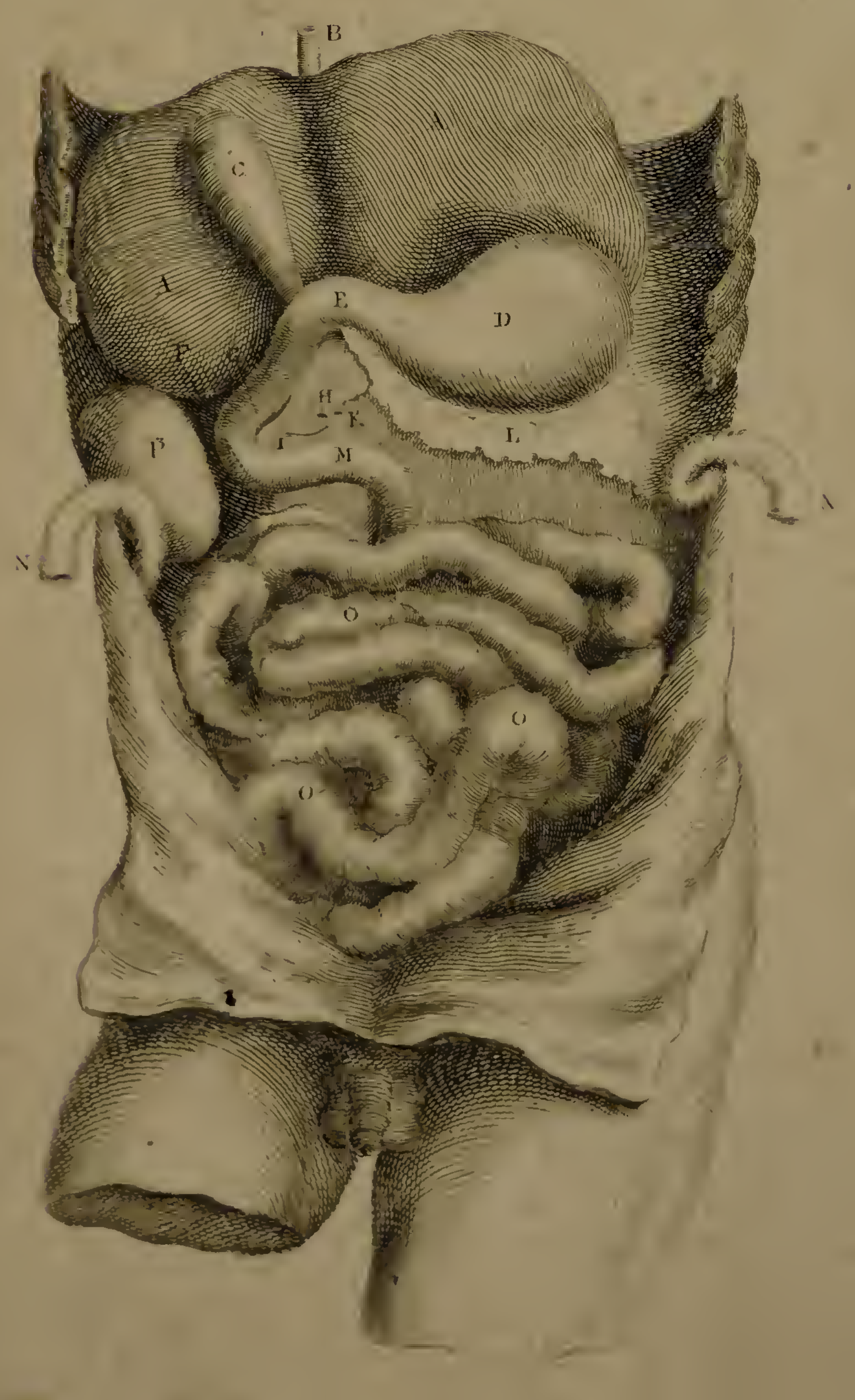


FIG. IV

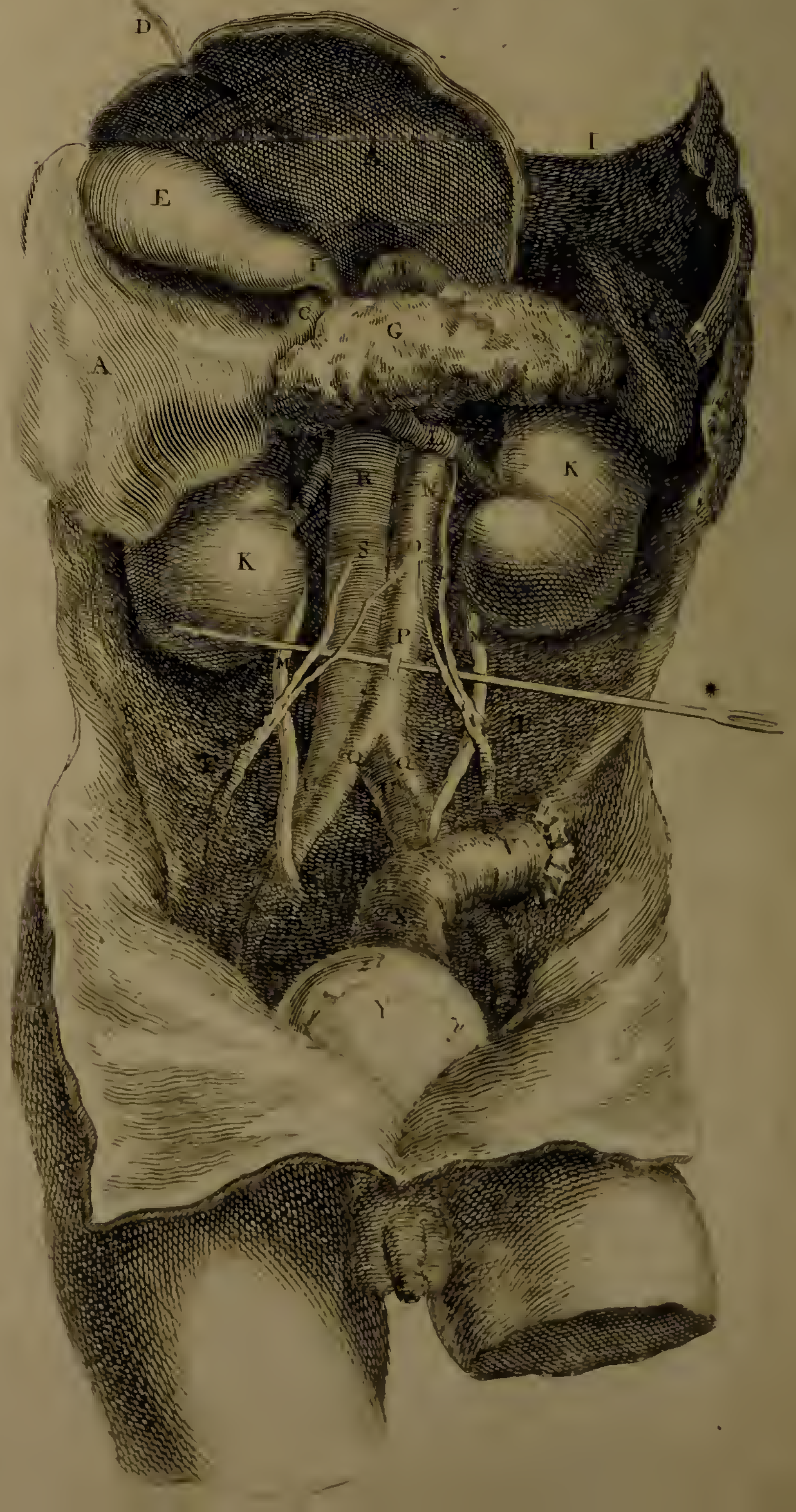


TABLE XVII.

REPRESENTS the Situation of the THORACIC and ABDOMINAL VISCERA.

FIG. I. From EUSTACHIUS.—With Improvements.

THE Sternum, Parts of the Ribs, and Abdominal Muſcles, removed, and the Integuments turned back, to ſhew the VISCERA ſituated in the Fore-part of the THORAX and ABDOMEN.

A, The two lobes of the left ſide of the lungs.—B, The three lobes of the right ſide of the lungs.—C, C, C, The pleura, going to form the anterior part of the mediaſtinum.—D, The thymus.—E, E, The pericardium.—F, F, F, A ſection of the diaphragm.—G, H, The right and left lobes of the liver.—I, The ligamentum latum of the liver.—K, The umbilicus.—L, The umbilical vein, changed into the ligamentum rotundum.—M, M, The umbilical arteries, changed into ligaments.—N, The urachus, aſcending from the fundus of the bladder, to be fixed to the umbilicus.—O, O, O, O, Q, Q, The omentum majus, with its blood-veſſels.—P, P, The ſtomach.—Q, Q, The large arch of the colon, ſhining through the omentum.—R, R, R, The under part of the ſmall inteſtines: The upper part is ſeen obſcurely through the omentum.—S, The fundus of the bladder.

FIG. 2. From CHESELDEN.

Repreſents the CONTENTS of the THORAX and ABDOMEN, after removing the Thymus, Mediaſtinum and Pericardium from the Thorax, and the Omentum, Urachus and Umbilical Arteries from the Abdomen.

A, The right lung, part of which is cut off, to ſhew the large blood-veſſels.—B, The left lung.—C, The right ventricle of the heart.—D, The right auricle of the heart.—E, The vena cava ſuperior.—F, F, The ſubclavian veins—G, G, The internal jugular veins.—H, The aorta aſcendens.—I, The pulmonary artery.—K, K, The diaphragm.—L, L, The right and left lobes of the liver, with the veſtige of the ligamentum latum between.—M, The ligamentum rotundum.—N, The fundus of the gall-bladder.—O, The ſtomach, preſſed by the liver towards the left ſide.—P, The ſpleen.—Q, Q, The kidneys, hid by the inteſtines.—R, R, The convolutions of the ſmall inteſtines.

FIG. 3. From MONRO *Senior*,

Is intended to ſhew the Courſe of the DUODENUM, with the Inſertion of the BILIARY and PANCREATIC DUCTS, in a CHILD.

A, The liver, larger proportionally than in the adult, and raiſed to ſhew its under ſide.—B, The umbilical vein.—C, The gall-bladder, full of bile, and more pyriform than in the adult.—D, The ſtomach, diſtended with air.—E, The ſeat of the pylorus, and beginning of the duodenum.—F, The duodenum making a turn to go acroſs the ſpine.—G, The termination of the ductus communis choledochus in the duodenum.—H, The pancreatic duct terminating in the duodenum, at the ſide of the common biliary duct.—I, The duct of the pancreas minus, ending in the pancreatic duct.—K, The meſenteric artery and vein, cut as they paſs in the nitch between the pancreas and pancreas minus.—L, The remains of the omentum.—M, The continuation of the duodenum, drawn conſiderably down, along with the other inteſtines, ſo as to have a full view of its other parts.—N, N, The cut ends of the great arch of the colon, turned aſide.—O, O, The turns of the jejunum and ilium.—P, The right kidney.

FIG. 4. From CHESELDEN.

Situation of the ASSISTANT CHYLOPOETIC VISCERA, and of the ORGANS of URINE and GENERATION in the MALE.

A, A, The hollow, or under ſurface of the liver, turned upwards and to the right ſide.—B, The lobule of Spigelius.—Between B, C, The ſides of the porta.—D, The round ligament of the liver.—E, F, The gall-bladder;—F, Its cervix ſending off the cyſtic duct.—G, The pancreas.—H, The ſpleen.—I, The ribs.—K, K, The kidneys.—L, L, The renal veins.—M, M, The ureter.—N, The aorta deſcendens.—O, The ſpermatic arteries.—P, Inferior meſenteric artery.—Q, Q, The common iliac arteries.—R, The inferior vena cava.—S, S, The ſpermatic veins, the right terminating in the vena cava, and the left in the renal vein of that ſide.—T, T, The ſpermatic arteries and veins, cloſely embracing each other in their way to the teſtes.—U, U, The common iliac veins.—V, The end of the colon.—X, The beginning of the rectum.—Y, *y*, *y*, *z*, The bladder of urine.—Y, The part which is covered only by cellular ſubſtance.—*y*, *y*, *z*, Shews how far the peritoneum reaches down upon the fore-part of the bladder.—*z*, The urachus.

FIG. 1.

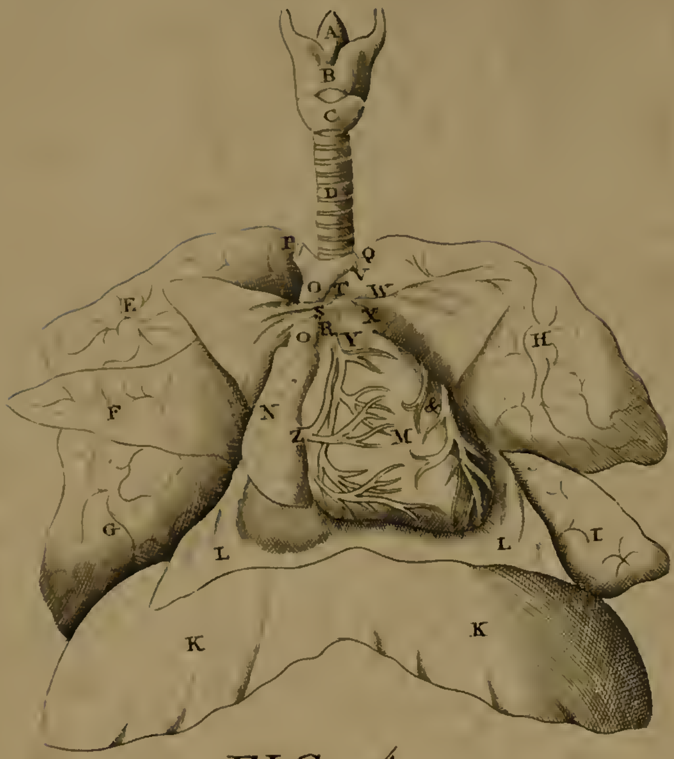


FIG. 2.

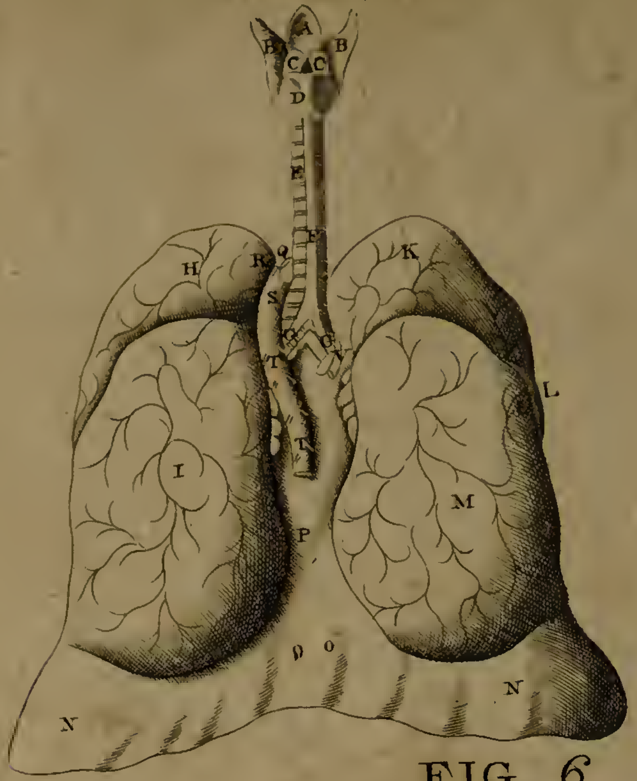


FIG. 3.

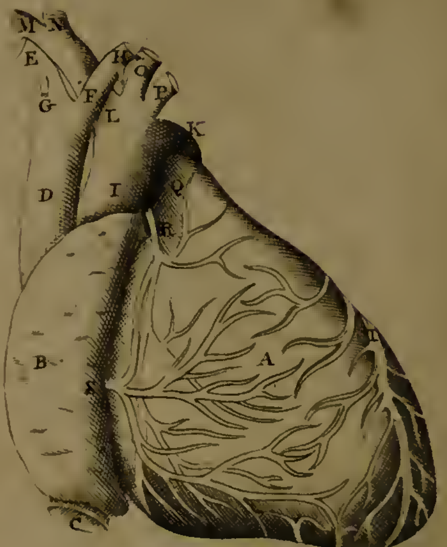


FIG. 4.

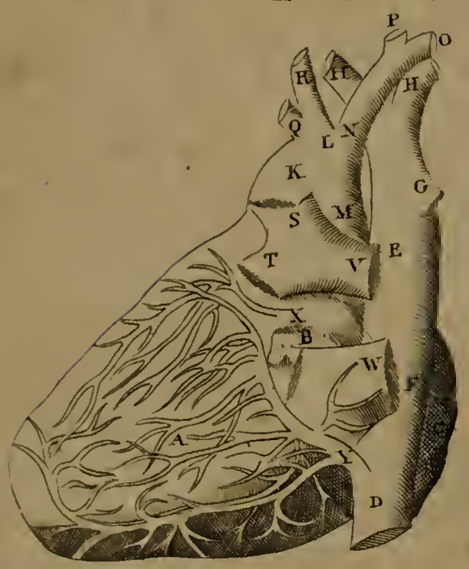


FIG. 5.

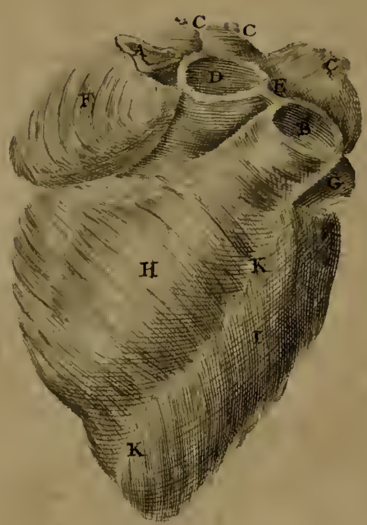


FIG. 6.

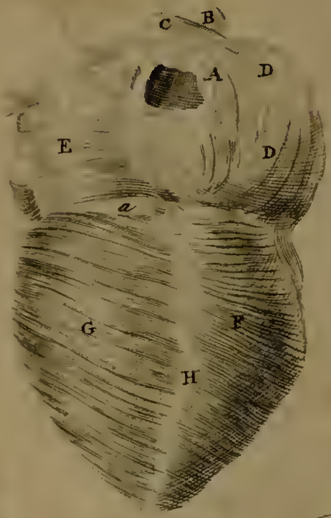


FIG. 7.

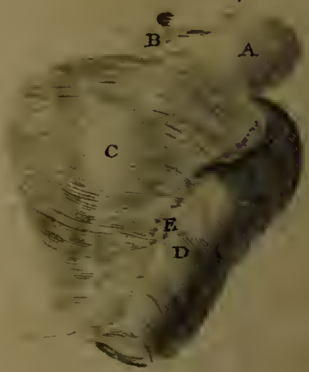


FIG. 8.

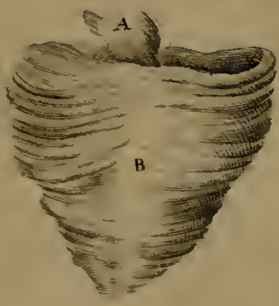


FIG. 9.

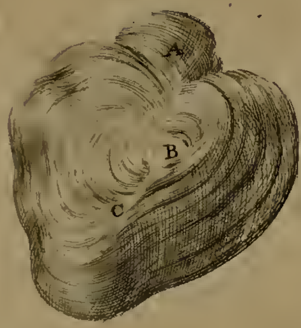


FIG. 10.

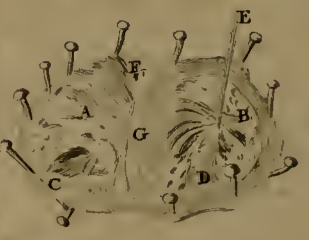


FIG. 11.

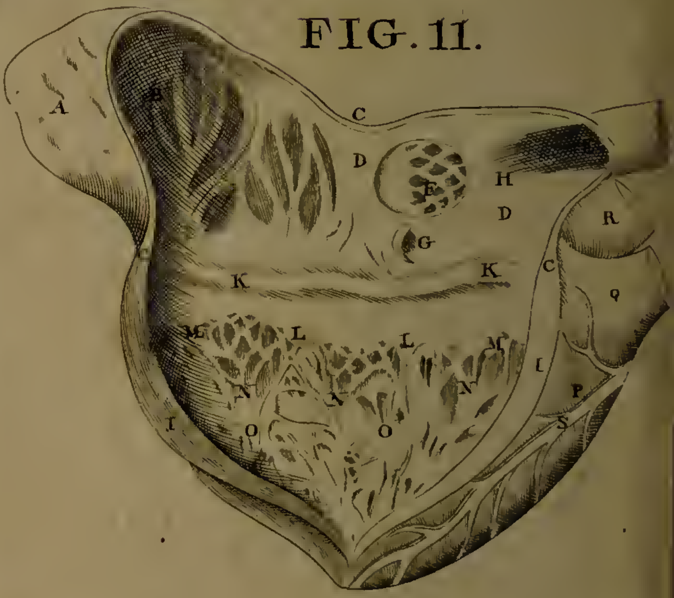


FIG. 12.

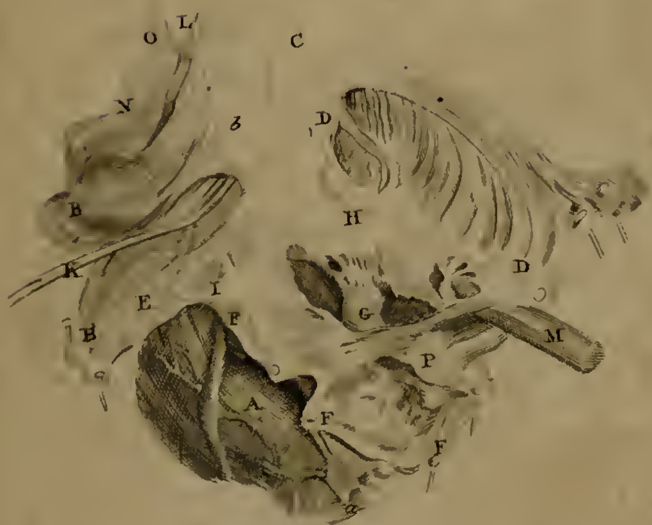


FIG. 13.

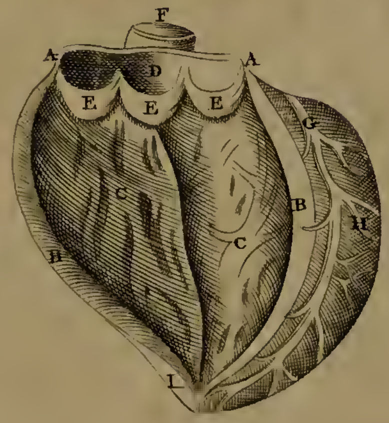


FIG. 14.

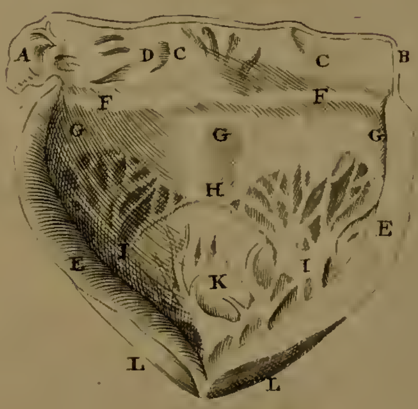


FIG. 15.

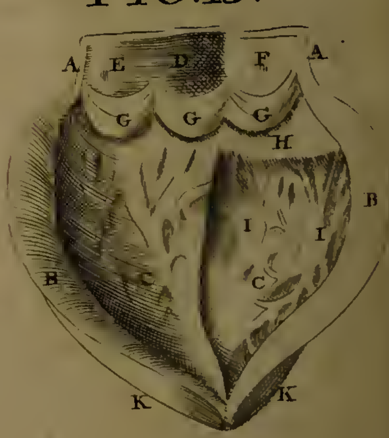


FIG. 16.

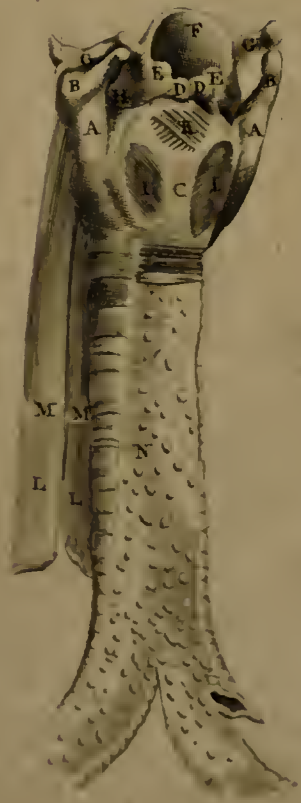


FIG. 17.

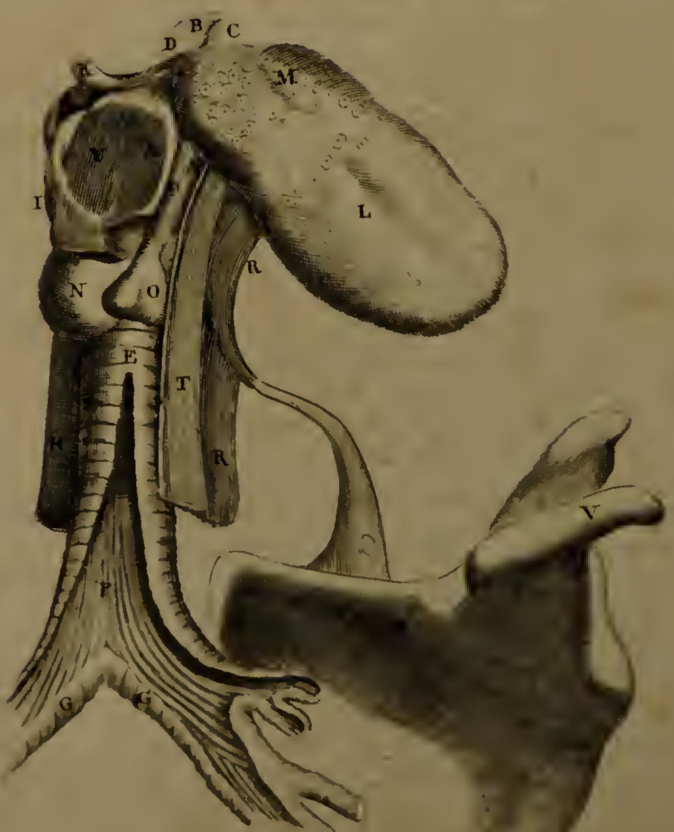


FIG. 18.

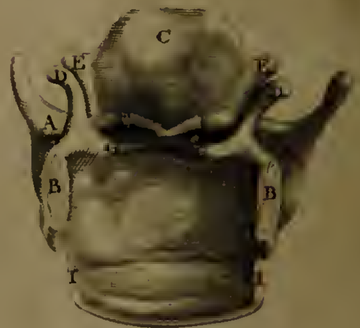


FIG. 19.

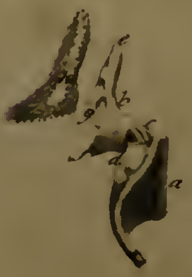


TABLE XVIII.

Gives different Views of the Larynx, Trachea, and Thoracic Viscera.

FIG. 1. From Euſtachius.

The Larynx, Trachea, Lungs, Pericardium, Heart, Large Blood-Veſſels, and Diaphragm, removed from the Body, nd viewed anteriorly.

A, B, C, The larynx.—A, The epiglottis.—B, The thyroid cartilage.—C, The cricoid cartilage.—D, The trachea.—E, F, G, H, I, The lungs turned back.—E, F, G, The three lobes of the right ſide.—H, I, The two lobes of the left ſide.—K, K, The diaphragm cut from the thorax.—L, L, The pericardium cut in a crucial direction, and the angles turned back.—M, The right ventricle of the heart.—N, The right auricle.—O, The vena cava ſuperior.—P, Q, The ſubclavian veins.—R, The aorta.—S, The pericardium adhering to the aorta.—T, Trunk common to the right ſubclavian and right carotid arteries.—V, Left carotid artery.—W, Left ſubclavian artery.—X, The pulmonary artery.—Y, The right coronary artery.—Z, One of the coronary veins.—&, Left coronary artery and vein: The coronary veſſels in this, as well as in the following Figures from Euſtachius, are beyond the proportional ſize.

FIG. 2. From Euſtachius.

A Poſterior View of the Parts repreſented in the former Figure.

A, B, B, C, C, D, The larynx.—A, The epiglottis.—B, B, Thyroid cartilage.—C, C, Arytenoid cartilages.—D, Cricoid cartilage.—E, The trachea;—F, Its membranous part.—G, G, The bronchi, alſo membranous behind.—H, I, The lobes of the left, and—K, L, M, The lobes of the right lung.—N, N, The diaphragm.—O, The foramen through which the œſophagus paſſes to the ſtomach.—P, Pericardium containing the heart.—Q, The left carotid artery.—R, Left ſubclavian artery.—S, The aorta, which turns over the left branch of the trachea, and ſends off,—T, T, The intercoſtal arteries.—V, Vena azygos, which bends over the right branch of the trachea.

FIG. 3. From Euſtachius.

Anterior View of the Heart and Large Veſſels.

A, The right ventricle of the heart.—B, The right auricle.—C, Vena cava inferior, cut acroſs, cloſe to the right auricle.—D, Vena cava ſuperior.—E, F, The ſubclavian veins. G, H, Internal mammary veins.—I, K, The aorta;—K, Its arch.—L, Root of the artery common to the right ſubclavian and right carotid.—M, Right ſubclavian artery.—N, Right carotid artery.—O, Left carotid artery.—P, Left ſubclavian artery.—Q, Pulmonary artery.—R, Right, or ſmall coronary artery, ariſing from the aorta, and paſſing between the right auricle and pulmonary artery.—S, Right, or ſmall coronary vein, terminating in the right auricle. The right and left coronary veſſels are ſeen running chiefly upon the right ventricle, and below, turning round towards the poſterior ſurface of the heart.—T, The left coronary veſſels.

FIG. 4. From Euſtachius.

The ſame Heart, ſeen from its Poſterior Part.

A, The left ventricle.—B, Left auricle.—C, Right auricle.—D, Vena cava inferior, divided near the right auricle.—E, F, The cava ſuperior.—G, Vena azygos.—H, H, Venæ ſubclaviæ.—K, L, M, Aorta;—L, Its arch.—N, Common root of the right ſubclavian and right carotid.—O, Right ſubclavian.—P, Right carotid.—Q, Left ſubclavian. R, Left carotid.—S, Trunk of the pulmonary artery.—T, V, Two great branches of the pulmonary artery.—W, Section of the left, or pulmonary ſinus.—X, Left, or great coronary artery, ariſing from the aorta, and running between the pulmonary artery and left auricle.—Y, Great coronary vein, repreſented in this Figure, terminating in the inferior cava. Upon the ſurface of the heart in general are ſeen, the principal branches of the coronary artery and vein, which, after ſupplying this ſide of the heart, turn round to communicate with the veſſels repreſented in Figure 3.

FIG. 5. From Cowper.

Anterior View of the Heart, to ſhew the Muscular Structure, and the Obliquity of the Muscular Fibres.

A, The vena cava.—B, A ſection of the pulmonary artery.—C, C, C, The pulmonary veins tied.—D, Section of the aorta.—E, Ductus arterioſus in the fœtus, now changed into ligament.—F, Right auricle, diſtended to ſhew the ſeries of its muſcular fibres.—G, The left auricle.—H, The oblique deſcending progreſs of the right ventricle.—I, The oblique aſcending progreſs of the fleſhy fibres of the left ventricle.—K, K, The tendinous union of the two ſets of fibres in the ſeptum of the heart.

FIG. 6. From Cowper.

View of the Poſterior Surface of the Heart.

A, The termination of the inferior cava in the right auricle.—B, Part of the ſuperior cava.—*a*, The vena coronaria.—C, The vena azygos, tied at its termination in the ſuperior cava.—D, D, The right auricle, repreſenting the various diſpoſitions of its fibres.—E, The muſcular fibres of the left ſinus venoſus.—F, The fibres of the right ventricle.—G, Thoſe of the left ventricle.—H, Their tendinous union in the ſeptum.

FIG. 7. From Cowper.

The Series of Fibres under thoſe repreſented in Figure 5.

A, Part of the pulmonary artery.—B, Part of the aorta. C, The fibres of the right,—D, Thoſe of the left ventricle.—E, The tendinous union of the fibres of both ventricles.

FIG. 8. From Cowper.

The Muscular Fibres, as they appear under thoſe of Figure 6.

A, Part of the aorta.—B, The tendinous union of the fibres of both ventricles.

Fig. 9. From Cowper.

The Double Spiral Order of the Fibres at the Apex of the Heart, which may partly be ſeen in Figure 7.

A, Part of the arteria pulmonalis.—B, The contortion of the fibres at the apex of the heart.—C, C, The tendinous union of both ventricles.

Fig. 10. From Cowper.

View of the Inner Surface of the Cone of the Heart, ſeen in the laſt Figure.

A, The point of the right ventricle.—B, That of the left.—C, The thickneſs of the ſides of the right ventricle.—D, That of the left.—E, A thread ſupporting the tendinous fibres which paſs from one ſide of the left ventricle to the other.—F, The trunks of the coronary artery and vein divided.—G, The tendinous union of both ventricles.

FIG. 11. From Euſtachius.

Right Auricle and Ventricle, cut longitudinally, to ſhew their Internal Surface.

A, The outer, and—B, The inner ſurface of the right auricle.—C, C, Cut edge of the right auricle and ſuperior vena cava.—D, D, Inner ſurface of the right ſinus venoſus without columnæ.—E, The orifice of the ſuperior cava.—F, Valve of Euſtachius, reticular in this Figure.—G, Orifice of the vena coronaria major, with its ſemilunar valve.—H, Veſtige

tige of the foramen ovale.—I, I, Cut edge of the right ventricle.—K, K, Opening between the right auricle and ventricle.—L, L, M, M, Valvulæ tricuſpides, of which one,—M, M, Is ſplit down the middle.—N, N, Tendinous cords, continued from the valvulæ tricuſpides, and forming plexus.—O, O, Columnæ carneæ of the right ventricle, forming plexuſes, and running in various directions.—P, Outer ſurface of the right ventricle.—Q, Pulmonary artery.—R, Aorta.—S, Principal branch of the vena coronaria major.

FIG. 12. From Cowper.

The Right Auricle and Ventricle laid open.

A, The left ſide of the heart, with its blood-veſſels filled with wax;—*a*, Its apex.—B, B, The inferior, and—C, The ſuperior cava laid open.—*b*, The right ſinus venoſus.—D, The right auricle, with its columnæ carneæ.—E, Semilunar valve at the mouth of the inferior cava.—F, F, The ſides of the right ventricle, divided.—G, One of the columnæ carneæ, to which the tricuſpid valve is fixed.—H, The valvula tricuſpis.—I, Valve at the orifice of the great coronary vein.—K, Probe paſſed through the foramen ovale, which in this, an adult ſubject, was open. The probe leads into,—L, The left ſinus venoſus.—M, Probe ſupporting the tricuſpid valve, and paſſing out at,—N, The right branch of the pulmonary artery.—O, The left branch of that artery.—P, Fleſhy fibres paſſing between the ſeptum cordis, and oppoſite ſide of the right ventricle.

FIG. 13. From Eustachius.

The Heart, with the Pulmonary Artery and Right Ventricle, cut longitudinally near the Left Ventricle, and ſpread out.

A, A, Cut edges of the pulmonary artery.—B, B, Cut edges of the right ventricle.—C, C, Inſide of the ventricle, in which there is a faint appearance of the columnæ carneæ.—D, Inſide of the pulmonary artery.—E, E, E, The three ſemilunar valves placed at the mouth of the artery, with their baſes fixed to the heart, and their cornua to the artery.—F, Aorta.—G, Ramus major of the great coronary vein ~~artery~~.—H, I, Exterior ſurface of the heart.

FIG. 14. From Eustachius.

Left Sinus Venosus and Ventricle laid open by a Longitudinal Inciſion.

A, Left auricle.—B, Cut edge of the left ſinus.—C, Inner ſurface of the ſinus.—D, Sinulus lunatus, formed by the veſtige of the foramen ovale.—E, E, Cut edge of the left ventricle.—F, F, Paſſage between the auricle and ventricle.—G, G, G, Valvulæ mitrales.—H, That part of the valve which is before the mouth of the aorta.—I, I, Columnæ carneæ, from which the tendons ariſe which are fixed to the edges of the valvulæ mitrales ~~tricuſpides~~.—K, Other columnæ carneæ within the ventricle.—L, L, Outer ſurface of the ventricle.

FIG. 15. From Eustachius.

Left Ventricle, and beginning of the Aorta, laid open by a Longitudinal Inciſion.

A, A, Cut edge of the aorta.—B, B, Cut edge of the ventricle.—C, C, Inner ſurface of the ventricle, with traces of the columnæ carneæ.—D, Inſide of the aorta.—E, Orifice of the right, and—F, Orifice of the left coronary artery.—G, G, G, The three ſemilunar valves in the mouth of the aorta, with their baſes fixed to the heart, the cornua to the aorta.—H, The valvulæ mitrales.—I, I, Columnæ carneæ, from which tendons run to the edges of theſe valves.—K, K, Outer ſurface of the ventricle.

FIG. 16. From Morgagni.

Back-view of the Larynx, Trachea, and ſome of the Muscles of the Larynx.

A, A, Thyroid cartilage.—B, B, Left prominence, and right ſuperior cornu of the thyroid cartilage.—C, Cricoid cartilage.—D, D, Arytenoid cartilages.—E, E, Arytenoid glands.—F, Epiglottis.—G, Os hyoides.—H, One of the thyro-arytenoid muſcles, occupying the lower region of the ventricle of the larynx of this ſide.—I, I, Poſterior crico-arytenoid muſcles.—K, Arytenoid muſcles, as found in this ſubject.—L, L, Sterno-hyoidei.—M, M, Tendinous interruptions of theſe muſcles.—N, The ſoft or fleſhy part of the trachea, ſtripped of its external coat, to ſhew the mucous glands ſituated there; the excretory ducts of which open into the trachea between the muſcular fibres ſeen in the next Figure.

FIG. 17. From Morgagni.

Exhibits the Tongue, Larynx, Part of the Œsophagus, and Scapula.

A, A, The thyroid cartilage.—B, The ſide of the epiglottis.—C, Ligament connecting it to the tongue.—D, One of its lateral ligaments.—E, The cartilages of the trachea.—F, The trachea and part of the bronchi, cut longitudinally, to ſhew the internal longitudinal bands of muſcular fibres, between which are the orifices of the excretory ducts of the mucous glands ſeen (Figure 16. N.)—G, G, The bronchi.—H, The œſophagus—I, The pharynx.—K, One of the cornua of the os hyoides.—L, The tongue, upon which are ſeen the papillæ minores and mediæ.—M, The foramen cæcum, ſurrounded by the third claſs of papillæ, called Majores.—N, Thyroid gland.—O, The iſthmus of this gland.—P, An appendix ſent up from it.—R, R, Sterno-thyroid muſcles.—S, Omo-hyoid.—T, Sterno-hyoid muſcle.—U, Hyo-thyroid.—V, Coracoid proceſs of the ſcapula.—W, Upper part of the ſcapula.

FIG. 18. From Morgagni.

The Larynx, cut longitudinally behind, and ſtretched back, to ſhew,

A, A, The thyroid cartilage.—B, B, The cricoid cartilage.—C, The epiglottis.—D, D, Arytenoid cartilages.—E, E, Long crura of the arytenoid glands.—F, F, Superior, and—G, G, Inferior ligaments of the glottis, by which the arytenoid and thyroid cartilages are connected to each other.—H, H, Ventricles of the larynx.—I, I, The firſt cartilages of the trachea.

FIG. 19. From Morgagni.

Repreſents the Articulation of the Arytenoid with the Cricoid Cartilage, alſo one of the Arytenoid Glands, &c.

a, Right longitudinal ſection of the cricoid cartilage, viewed anteriorly.—*b*, Right arytenoid cartilage, inclined outwards and backwards;—*c*, *d*, Its articulation with the cricoid cartilage.—*e*, The ſuperior, and—*f*, The inferior proceſſes.—*g*, Cavity in the anterior ſurface of the arytenoid cartilage, in which is ſituated,—*h*, The arytenoid gland, which is here repreſented detached.

k, Repreſents the ſhape and ſize of the left ventricle of the larynx.

FIG. I.

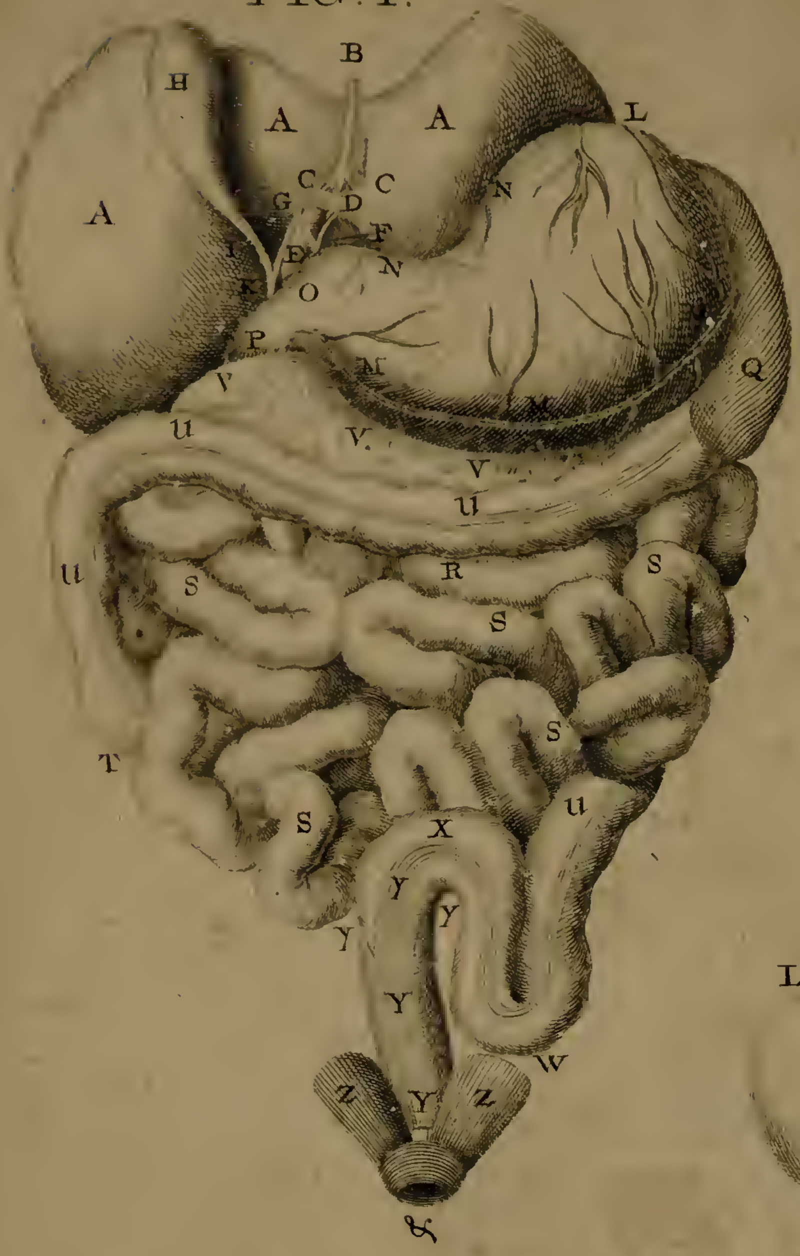


FIG. 2.

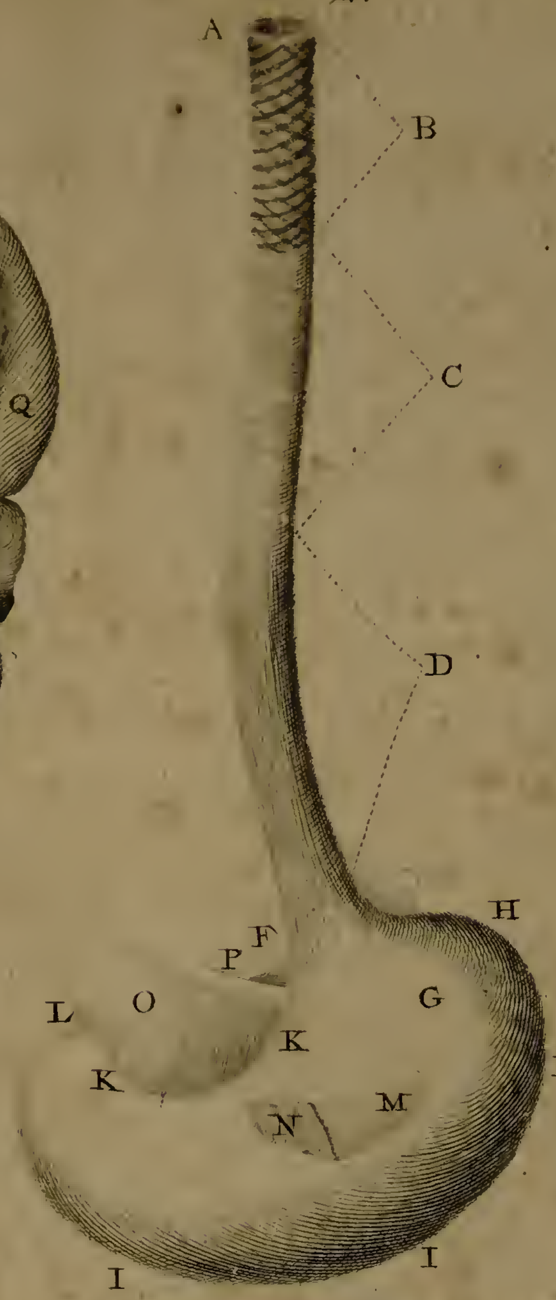


FIG. 3.

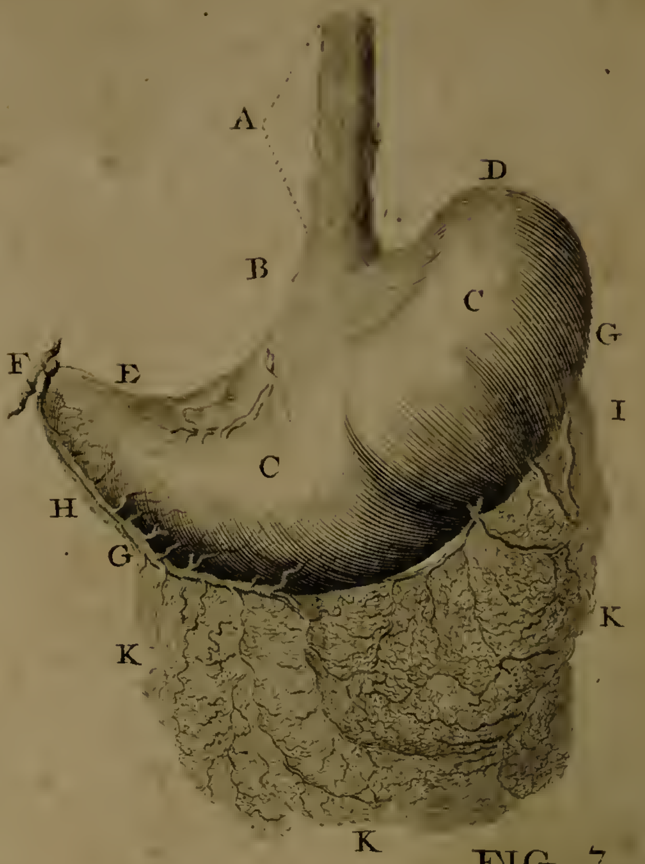


FIG. 6.

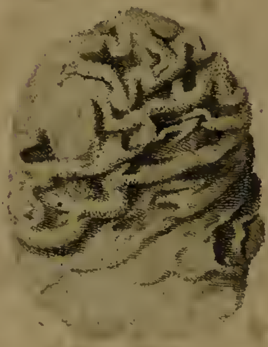


FIG. 8.

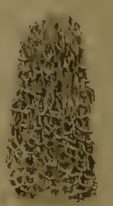


FIG. 7.

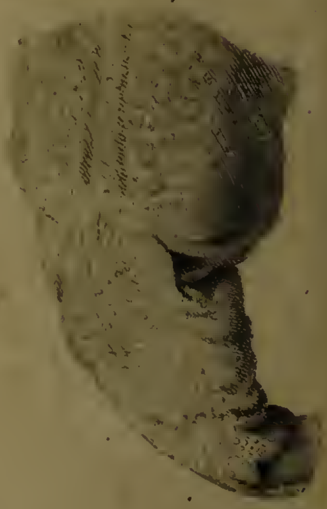


FIG. 4.

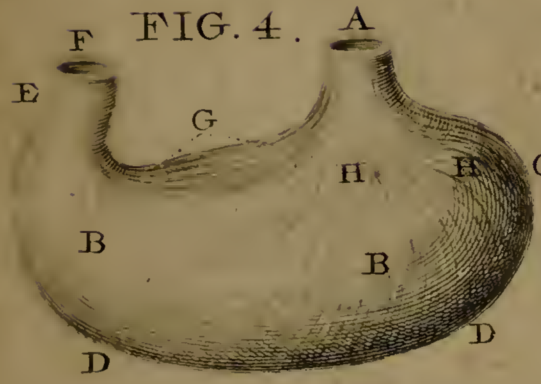


FIG. 5.

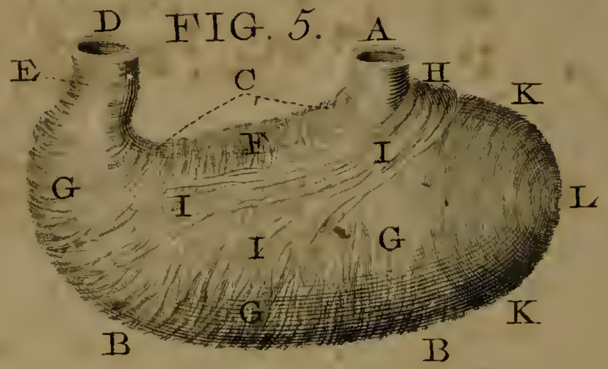


FIG. 9.

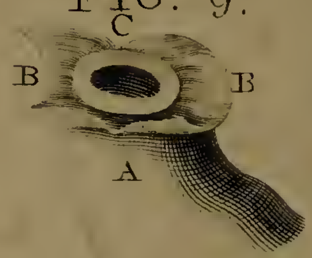


FIG. 10:

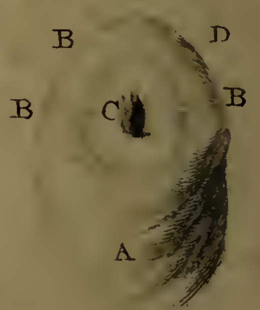


FIG. 11.

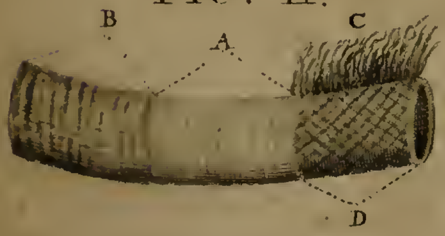


FIG. 12.

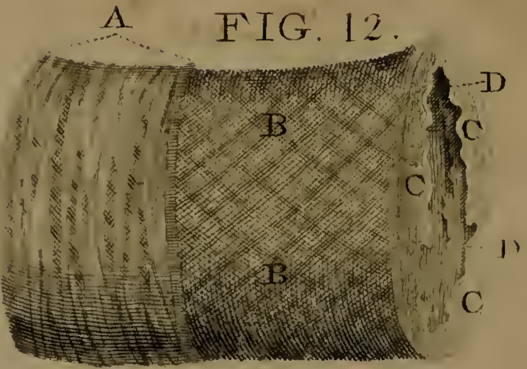


FIG. 13.

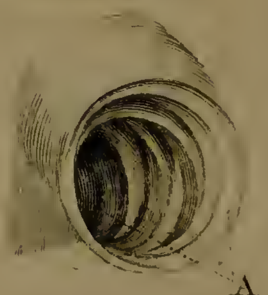


FIG. 14.

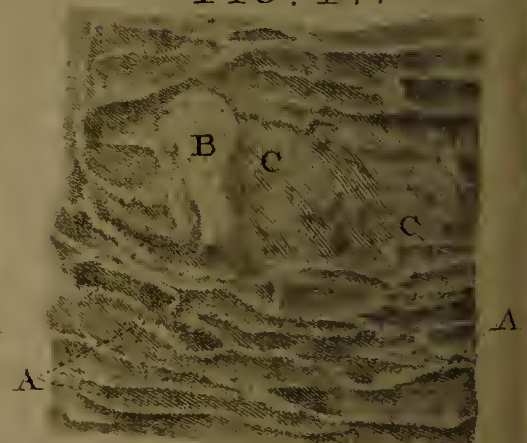


FIG. 20.

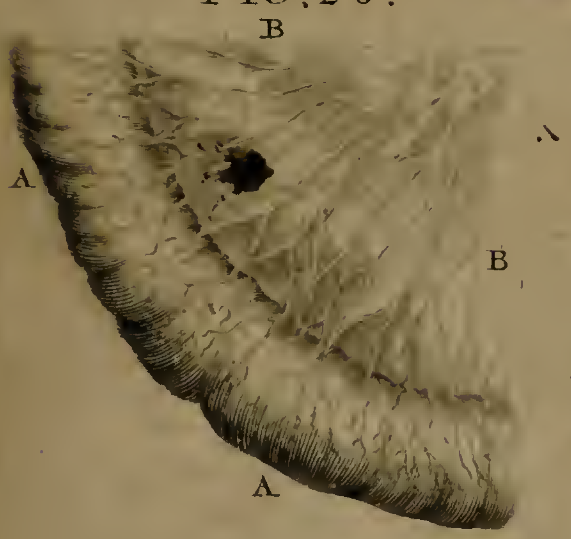


FIG. 18.

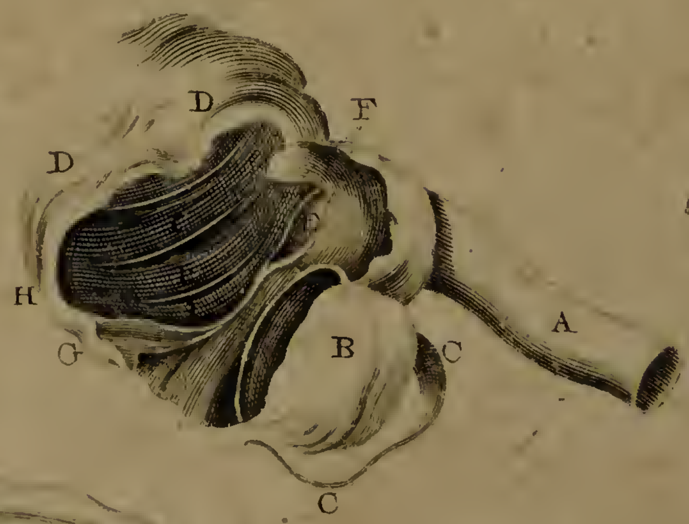


FIG. 15.

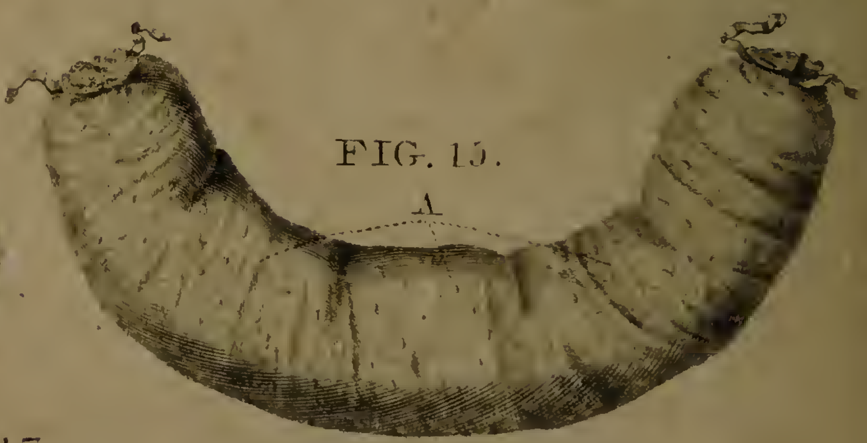


FIG. 19.

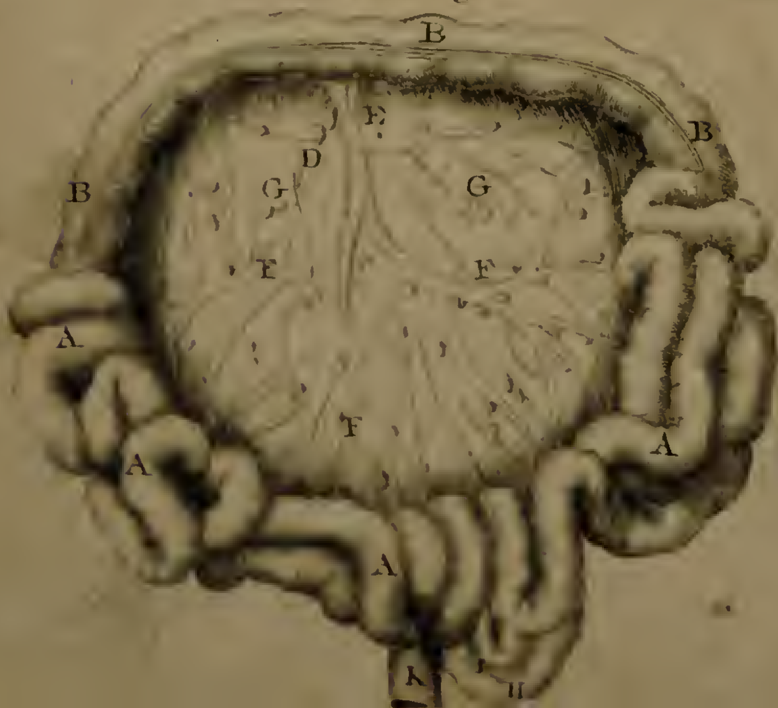


FIG. 17.

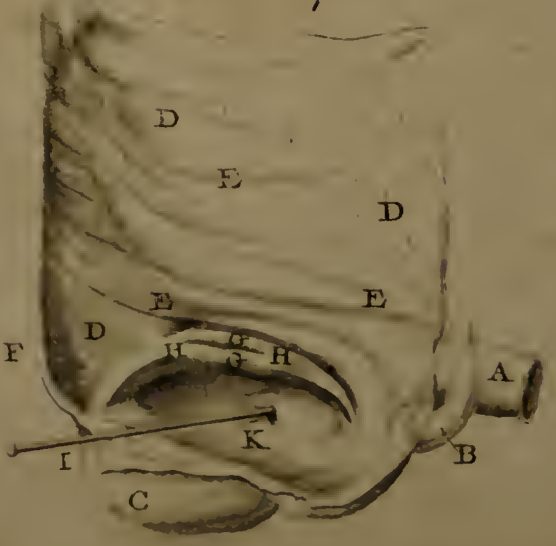


FIG. 16.

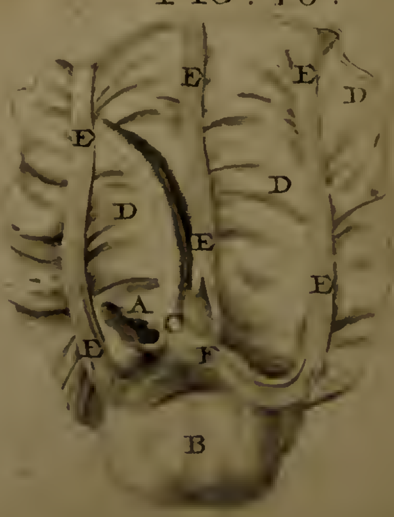


TABLE XIX.

REPRESENTS the Situation of the CHYLOPOETIC, and ASSISTANT-CHYLOPOETIC VISCERA; with the STRUCTURE of the ALIMENTARY CANAL.

FIG. 1. From EUSTACHIUS.

SHEWS the CHYLOPOETIC, and ASSISTANT-CHYLOPOETIC VISCERA, taken out of the BODY.

A, A, A, The concave part of the liver, turned up.—B, Ligamentum rotundum.—C, C, Paſſage of the ligamentum rotundum under—D, The iſthmus of the liver.—E, Vena Portæ.—F, Arteria hepatica.—G, Ductus hepaticus.—H, The gall-bladder.—I, Ductus cyſticus.—K, Ductus communis choledochus. The reſt of the viſcera are placed in the ſame manner as when in the body.—L, The great, or left extremity of the ſtomach.—M, M, M, The great curvature, and gaſtro-epiploic veſſels, the branches of which are repreſented too large.—N, N, The ſmall curvature.—O, The ſmall extremity of the ſtomach, and ſeat of the pylorus.—P, The duodenum.—Q, The ſpleen.—R, S, S, The convolutions of the jejunum and ilium.—T, The inteſtinum cæcum.—U, U, U, U, The colon, along which one of its muſcular ligaments runs.—V, V, V, Meſo-colon, with its blood-veſſels and glands.—W, X, Sigmoid flexure of the colon, with the ligament continued.—Y, Y, The inteſtinum rectum.—*y*, *y*, *y*, The three ligaments of the colon expanding upon the rectum.—Z, Z, Levatores ani.—&, The anus, ſurrounded by the ſphincter ani.—*a*, The ſeat of the proſtate gland.

FIG. 2. From EUSTACHIUS;—With ADDITIONS.

View of the Fore-part of the ŒSOPHAGUS, and Upper and Fore part of the STOMACH.

A, F, The œſophagus.—A, A ſection immediately below the pharynx.—B, Cellular coat.—C, The inner tranſverſe muſcular fibres.—D, The outer longitudinal muſcular fibres.—F, The cardia.—G, The ſtomach;—H, Its great, or left extremity;—I, I, I, Its great, or anterior curvature;—K, K, Its ſmall or poſterior curvature.—L, The ſmall, or right extremity. The letter alſo points out the ſituation of the pylorus, and beginning of the duodenum.—M, Part of the external, or peritoneal coat, ſeparated and turned back, to ſhew,—N, Part of the ſecond, or muſcular coat.—O, P, Continuation of the external membrane of the ſtomach, forming the omentum minus, &c.

FIG. 3. From RUYSCH.

View of the STOMACH, with part of the ŒSOPHAGUS, and the OMENTUM of a CHILD.

A, A portion of the œſophagus, with its external longitudinal muſcular fibres.—B, The cardia.—C, C, The ſuperior anterior ſurface of the ſtomach.—D, The great, or left extremity.—E, The ſmall extremity.—F, The ſtomach, tied at the pylorus.—G, G, Great, or anterior curvature.—E, B, The ſmall, or poſterior curvature, upon which are ſeen the branches of the ſuperior coronary artery.—H, The right epiploic gaſtric artery, ſending off principal branches which plunge immediately into the ſubſtance of the ſtomach, and others which take a long courſe, and divide into innumerable branches upon the omentum majus.—I, Branches of the ſplenic artery, termed Arteriæ Breves, ſupplying this part of the ſtomach and the omentum.—K, K, K, Omentum majus.

FIG. 4. MEM. DE L'ACAD. &c. à Paris.

Repreſents the EXTERNAL MUSCULAR FIBRES of the STOMACH, after the Peritoneal Coat has been removed.

A, The cardia.—B, B, The ſuperior anterior ſurface of the ſtomach.—C, The left extremity.—D, D, The great arch.—E, The pylorus.—F, The beginning of the duodenum.—G, G, A bundle of muſcular fibres continued from the œſophagus, along the ſmall curvature of the ſtomach, towards the duodenum.—H, H, Muſcular fibres from the œſophagus, which ſpread out upon the anterior ſurface of the ſtomach, and run to its right extremity.

FIG. 5. MEM. DE L'ACAD. &c. à Paris.

Muſcular Fibres of the Stomach, deeper ſeated than thoſe in the former Figure. They are ſeen collected into bundles, which run in different directions. The letters referring only to the direction of theſe Fibres, need no explanation.

FIG. 6. From RUYSCH.

A portion of the Stomach inverted, to ſhew its Plicæ. In this Figure innumerable pores are likewiſe repreſented.

FIG. 7. From RUYSCH.

A portion of the Stomach inverted, cut off above the pylorus. In the upper part of the Figure, inſtead of Plicæ, little prominences appear; in the under part, the Interſtitial Cells are ſhewn.

FIG. 8. From RUYSCH.

A portion of the Stomach, with the Interſtitial Cells magnified, the Peritoneum having been removed.

FIG. 9. From HEISTER.

Right Side of the Stomach, diſtended and dried, to ſhew the PYLORUS.

A, The right ſide of the ſtomach.—B, B, Section of the beginning of the duodenum.—C, The pylorus, placed ſomewhat obliquely, ſurrounding the paſſage from the ſtomach to the duodenum.

FIG. 10. From the LIFE.

Repreſents the Pylorus in the natural ſtate, in which it is more contracted than when diſtended and dried.

FIG. 11. From the LIFE.

A portion of the Small INTESTINE, to ſhew its COATS.

A, The peritoneal coat.—B, The muſcular coat, compoſed of longitudinal and tranſverſe fibres, the peritoneal coat being ſuppoſed to be removed.—C, The muſcular coat, raiſed to ſhew,—D, The cellular coat, which is here repreſented too uniformly checkered.

FIG. 12. MEM. DE L'ACAD. &c. à Paris.

Gives another View of the Muſcular and Cellular Coats of the Inteſtines, but upon a larger ſcale than Figure 11.

FIG. 13. From CHESELDEN.

A Portion of the INTESTINUM JEJUNUM.

A, The valvulæ conniventes, as they appear in a dried preparation.

FIG. 14. From RUYSCH.

Inner Surface of a Portion of the INTESTINUM JEJUNUM of an ADULT.

A, A, The tunica villoſa, lining the valvulæ conniventes.—B, A portion of the villous coat, raiſed to ſhew the nervous or cellular coat.—C, C, The cellular coat, in which,

after

TABLE XIX. CONTINUED.

after the villous has been removed, nothing but the veſtiges of the valvulæ conniventes appear.

FIG. 15. From Ruysch.

A Portion of the Inteſtinum Jejunum of a Child, inverted and inflated, to ſhew the Mucous Glands, which are placed partly on, and partly between the Valvulæ Conniventes.

FIG. 16. From Morgagni.

Repreſents the Intestinum Cæcum, and part of the Colon, ſlit open along the right ſide, then ſpread out, and viewed Exteriorly, to ſhew the Riſe of the three Ligaments of the Colon.

A, The termination of the inteſtinum ilium in the cæcum.—B, That part of the inteſtines which was conſidered as the true cæcum by the ancients.—C, The appendix vermiformis, drawn upwards, to ſhew,—E, E, E, &c. The three ligaments of the colon beginning from it.—D, D, The outer ſurface of the inteſtine.

FIG. 17. From Morgagni.

Inner View of the ſame Part of the Intestine as that ſeen in the former Figure.

A, The ilium, cut acroſs near its termination in the cæcum.—B, Appendix vermiformis brought into view.—C, Beginning of the cæcum entire.—D, D, D, Inner ſurface of the cæcum, and part of the colon.—E, E, E, The cells of this part of the gut;—F, Its cut edge.—G, G, The end of the ilium projecting into the cæcum, and forming the valve of the colon.—H, H, Fræna, or retinacula of the valve.—I, A probe put into the orifice of the appendix vermiformis.—K, Cavity of the cæcum of the ancients.

FIG. 18. From Heister.

Repreſents a portion of the Intestinum Ilium, the Cæcum, and part of the Colon, with the Valvula Coli.

A, The ilium aſcending obliquely, and paſſing into the left ſide of the cæcum.—B, Part of the inteſtinum cæcum entire.—C, The appendix vermiformis, turned upwards.—B, F, D, H, G, The cæcum, and part of the colon laid open.—E, Aperture of the valve of the colon or of the ilium, into the cæcum.—F, G, Membranes ſupporting the valve, called its Retinicula, Ligaments, or Frænula.—I, I, I, The cells of the colon.

FIG. 19. From Eustachius.

Shews the Mesentery, with the Arteries, Veins, Mesenteric Glands, and Intestines, turned aſide in the courſe of the Mesentery.

A, A, The inteſtinum jejunum and ilium, ſpread out.—B, B, The colon turned up, one of the ligaments of which is ſeen.—D, E, F, G, The meſentery expanded.—D, E, The ſuperior meſenteric vein and artery; upon the meſentery are ſeen, little dark-coloured ſpots, which repreſent its glands.—H, Sigmoid flexure of the colon.—I, One of its ligaments.—K, The rectum.

FIG. 20. From Heister.

A Portion of the Small Intestine and Mesentery, with the Lacteal Vessels.

A, A, Part of the jejunum, through which its rugæ ſlightly appear.—B, B, The lacteals, which the author of the Figure ſays he found much more numerous than are here repreſented.

FIG. 1.

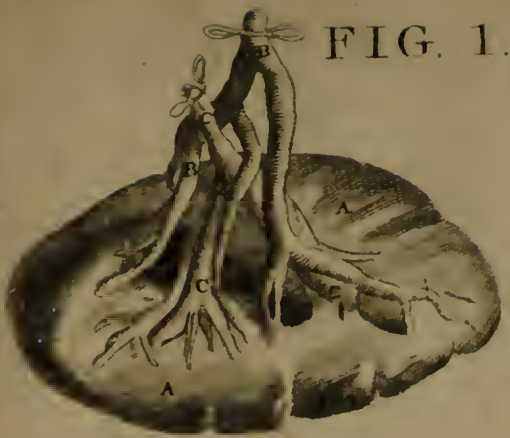


FIG. 2.

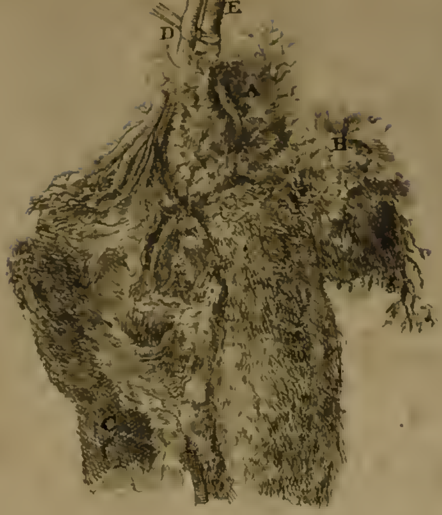


FIG. 3.

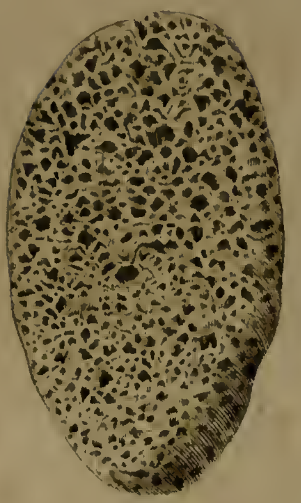


FIG. 4.

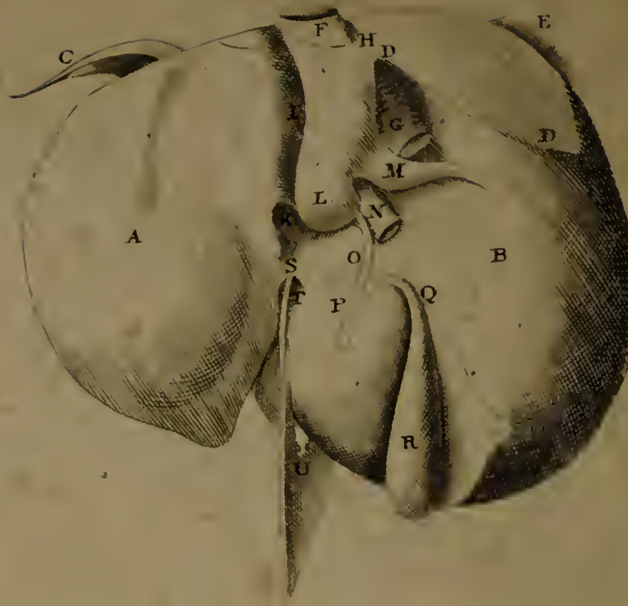


FIG. 5.

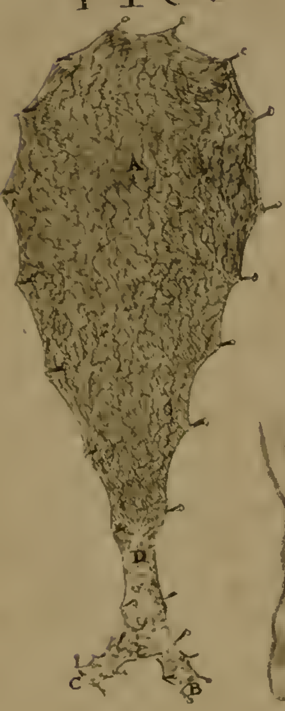


FIG. 6.

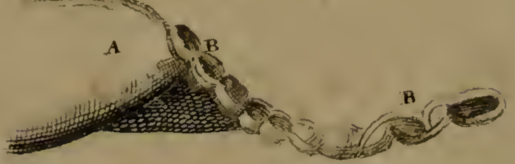


FIG. 7.

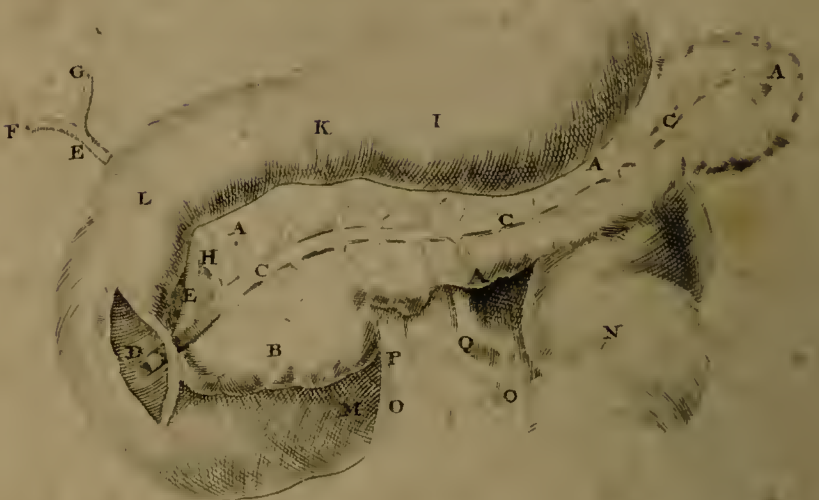


FIG. 8.

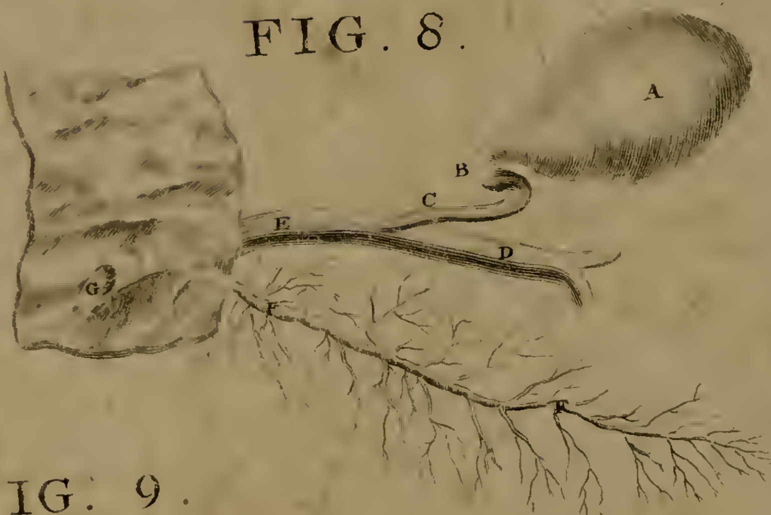


FIG. 9.

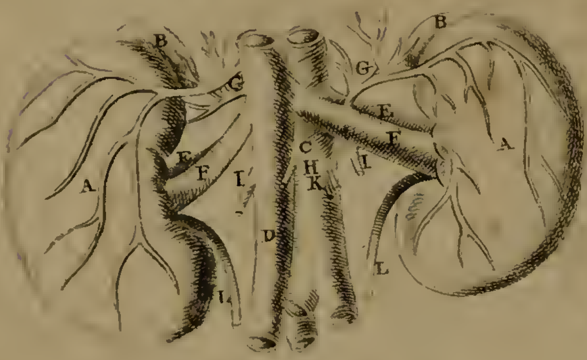


FIG. 10.

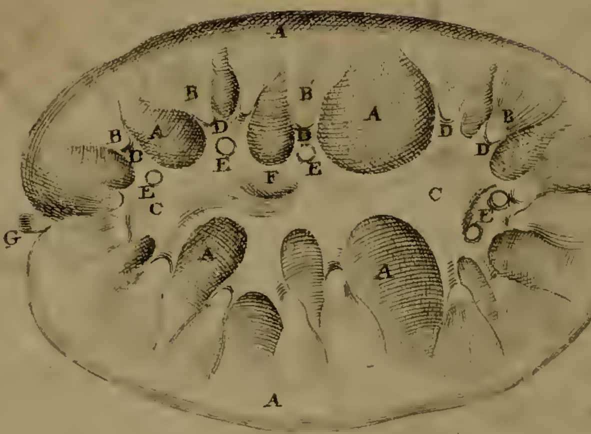


FIG. 11.

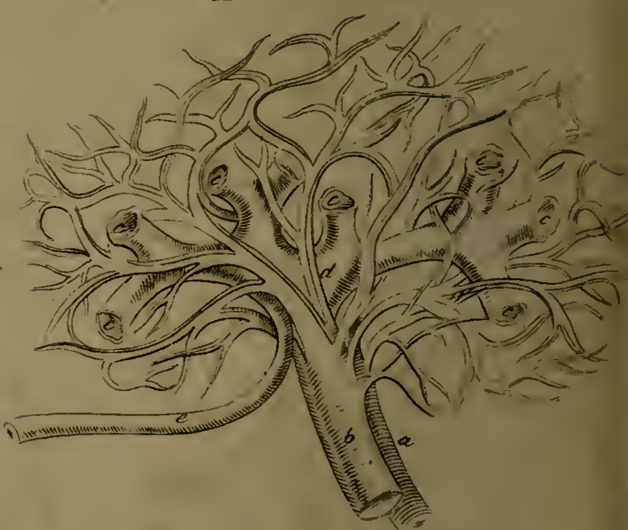


FIG. 12.

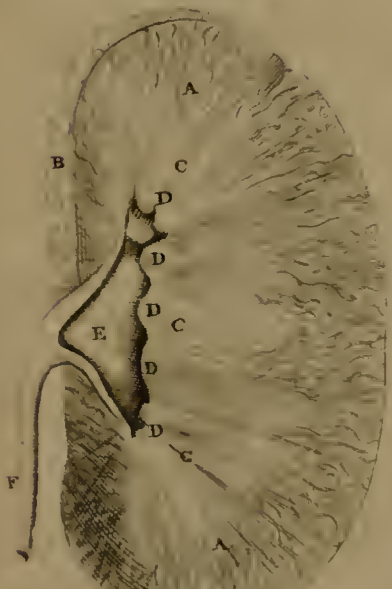


FIG. 13.

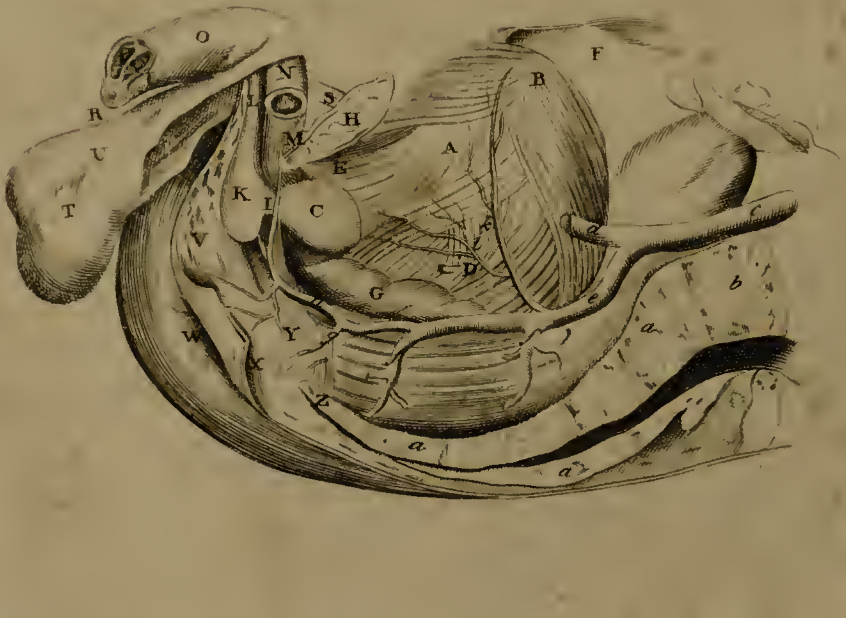


FIG. 14.

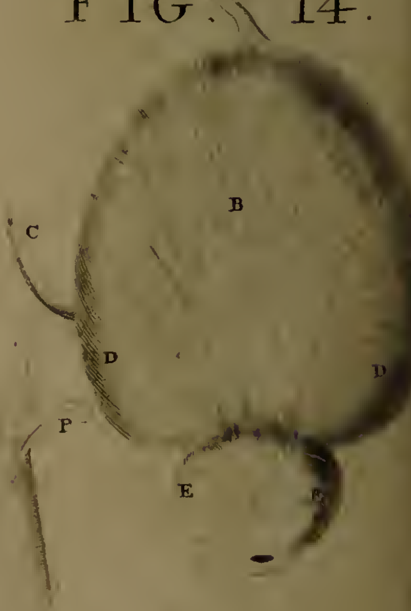


FIG. 15.

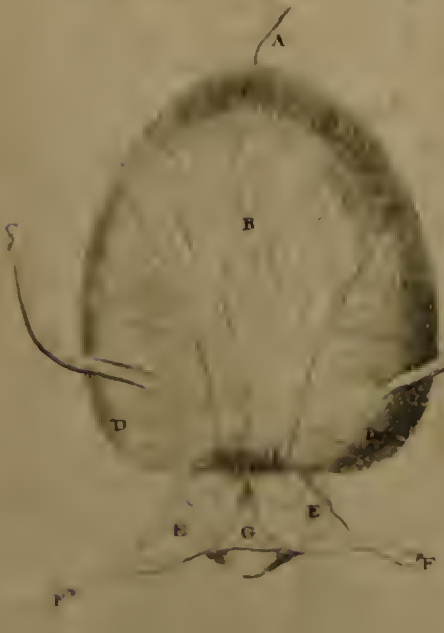


FIG. 16.

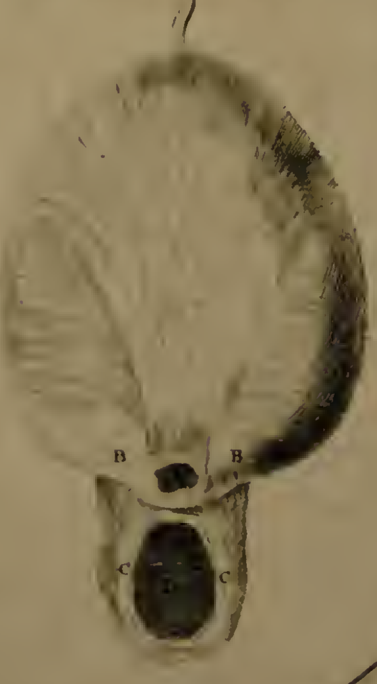


FIG. 17.

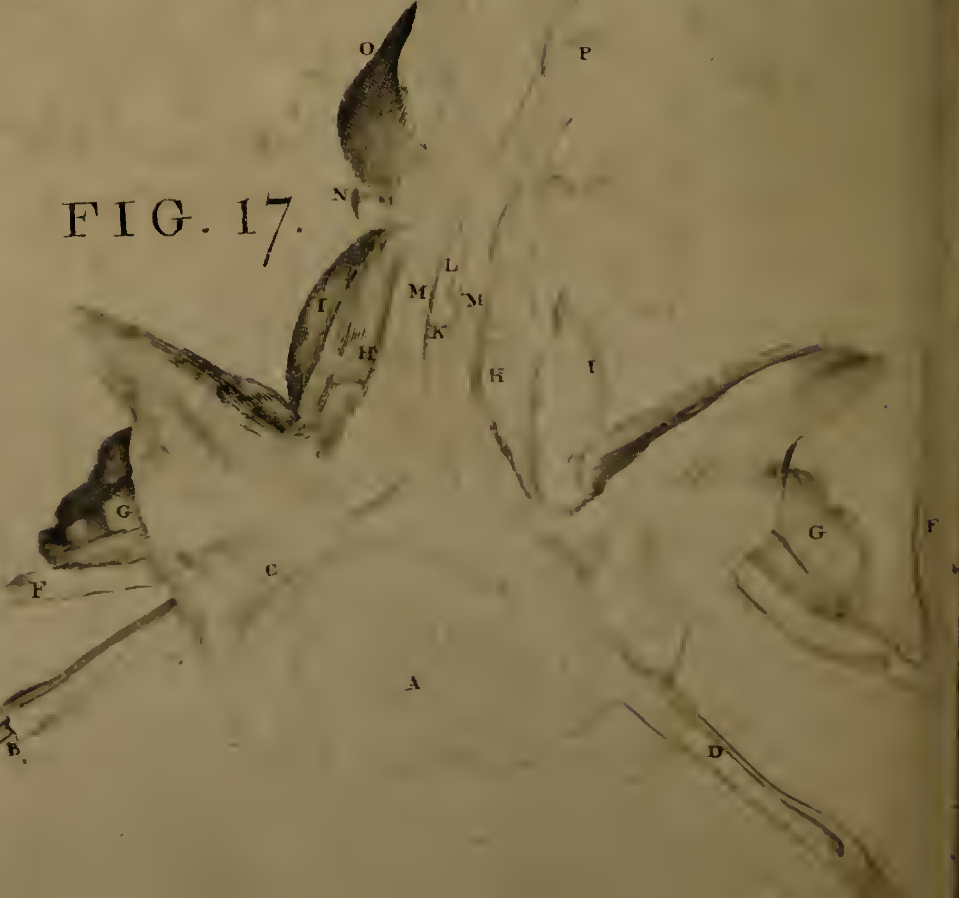


TABLE XX.

THE Situation and Structure of the ASSISTANT-CHYLOPOETIC VISCERA, with different Views of the VESICA URINARIA, and ORGANS of GENERATION.

FIG. 1. From BIDLOO.

A View of the SPLEEN, with its Blood-veſſels injected.

A, A, The internal concave part of the ſpleen next the ſtomach and pancreas.—B, B, The arteries.—C, C, The veins, which, like the arteries, form various contortions before they enter the ſpleen.

FIG. 2. From RUYSCH.

Portion of the SPLEEN, with its VESSELS, ſome of which are unfolded.

A, The extremities of the blood-veſſels completely unfolded, reſembling wool or cotton; before they were unfolded, they reſembled the form of glands.—B, The extremities of theſe veſſels, partly unfolded.—C, A portion of the ſurface of the ſpleen, not unfolded.—D, Splenic artery.—E, Splenic vein.

FIG. 3. From the LIFE.

The common Cellular Texture of the Spleen, which has been miſtaken for Cells peculiar to that Organ.

FIG. 4. From EUSTACHIUS.

View of the CONCAVE, or Under SURFACE of the Liver.

A, The left,—B, The right lobe of the liver.—C, The left lateral ligament.—D, D, The ſurface by which the liver adhered to the diaphragm.—E, Ligamentum dextrum.—F, G, Vena cava inferior.—H, Portion of the liver which ſurrounds the vena cava.—I, The ſinus where the ductus venoſus of the fœtus runs.—K, Sinus, where blood- and biliary-veſſels penetrate, which belong chiefly to the left lobe of the liver.—L, M, Eminences between which the vena portæ N, enters.—~~G~~, F, I, L; ~~M~~, H; The lobulus Spigelii.—O, Hepatic duct.—P, Ductus choledochus.—Q, Ductus cyſticus.—R, The gall-bladder, projecting beyond the edge of the liver.—S, Iſthmus, under which a portion of the vena portæ joins the umbilical vein.—T, Sinus where the round ligament enters.—~~T~~, U, Ligamentum latum, in the edge of which the ligamentum rotundum is incloſed.

FIG. 5. From RUYSCH.

Section of the GALL-BLADDER and BILIARY DUCTS.

A, The inner ſurface of the gall-bladder, to ſhew its reticulated appearance.—B, A portion of the hepatic duct.—C, The common duct.—D, The cyſtic duct. In the cyſtic duct the cells, and in the gall-bladder and biliary ducts, in general, the orifices of the mucous ducts are repreſented, though not very diſtinctly.

FIG. 6. From HEISTER.

A View of the TORTUOUS COURSE and CELLS of the BILIARY CYSTIC DUCT, with part of the GALL-BLADDER.

A, The neck of the gall-bladder.—B, B, The cyſtic duct, having within various cells, communicating with each other, but preventing the two quick paſſage of the bile.

FIG. 7. From DE GRAAF.

View of the PANCREAS, and of the Inſertion of the PANCREATIC and BILIARY DUCTS in the DUODENUM.

A, A, &c. The pancreas.—B, The pancreas minus of Winſlow.—C, C, C, Pancreatic duct, running through the whole length of, and receiving many branches from the ſubſtance of the pancreas.—D, Pancreatic duct joining the common biliary duct, and ending in the duodenum, part of which is ſlit open.—E, E, Ductus communis choledochus.—F, Ductus cyſticus.—G, Ductus hepaticus.—H, Part of the pancreas, cut from the ductus communis which it covers.—I, Right extremity of the ſtomach.—K, Pylorus.—L, The duodenum.—M, The duodenum paſſing behind the meſentery.—N, The ſame inteſtine emerging upward in the left hypochondrium, where it obtains the name of Jejunum.—O, O, The meſentery.—P, Vena meſeraica.—Q, Arteria meſeraica.

FIG. 8. From CHESELDEN.

View of the GALL-BLADDER, BILIARY and PANCREATIC DUCTS, with their Termination in the Duodenum.

A, The gall-bladder.—B, Natural curvature of the neck of the gall-bladder.—C, Ductus cyſticus.—D, Ductus hepaticus, compoſed of two principal branches.—E, Ductus communis choledochus.—F, F, Ductus pancreaticus, with its branches.—G, The termination of the biliary and pancreatic ducts in the duodenum, which is ſlit open.

FIG. 9. From EUSTACHIUS.

Repreſents the KIDNEYS, with their BLOOD-VESSELS.

A, A, The kidneys, the right one appearing larger and lower than the left.—B, B, The renal glands, the right alſo repreſented larger than the left.—C, The aorta.—D, The inferior cava.—E, E, Renal arteries, the right longer, lower, and more oblique than the left.—F, F, Renal veins of the right ſide, ſhorter, lower, and more oblique than the left.—G, G, Veins belonging to the kidney and renal glands.—H, Spermatic arteries.—I, I, Spermatic veins, the right ending in the vena cava, the left in the renal vein.—K, The inferior meſenteric artery, a great deal too ſmall.—L, L, The ureters.

FIG. 10. From EUSTACHIUS.

Shews the KIDNEY and its PELVIS, divided through the middle from the Outer Edge to the URETER.

A, A, Cut ſurface of the cortical ſubſtance.—B, B, Section of the uriniferous ſubſtance, with radiated fibres ending in papillæ.—C, C, Section of the pelvis of the kidney.—D, D, &c. Section of the branches of the pelvis, called Infundibula, which receive the urine from the papillæ.—E, E, E, Some of the papillæ entire.—F, The beginning of the ureter.—G, The continuation of the ureter.

FIG. 11. From EUSTACHIUS.

The Diſtribution of the Large BLOOD, and URINIFEROUS VESSELS in the Subſtance of the KIDNEY.

a, The renal, or emulgent artery, divided into branches in the ſubſtance of the kidney.—*b*, The correſponding vein.—*c*, *c*, *c*, *c*, The beginnings of the infundibula, uniting into trunks, which form,—*d*, The pelvis.—*e*, The ureter continued from the pelvis.

FIG. 12. From RUYSCH.

Section of the KIDNEY, to obtain a view of the MINUTE VESSELS.

A, The minute branches of the renal artery, running in a ſerpentine courſe, and many of them degenerating into uriniferous tubes.—B, A portion of the external ſurface of the kidney.—*c*, *c*, &c. The uriniferous ducts.—*d*, *d*, &c. Papillæ.—E, E, Section of the pelvis.—F, The ureter.

FIG. 13. From LE DRAN.

CONTENTS of the MALE PELVIS, ſeen on the Left Side.

A, Veſica urinaria, ſhewing the different orders of its fleſhy fibres, after removing the outer coverings.—B, The

TABLE XX. CONTINUED.

fundus veficæ.—C, The proſtate gland ſurrounding the neck of the bladder.—D, The entrance of the ureter into the bladder.—E, Tendinous ligaments of the bladder.—F, The peritoneal coat reflected.—G, Veſicula ſeminalis.—H, Section of the left os pubis, near its ſymphyſis.—I, The membranous part of the urethra.—K, Bulb of the urethra.—L, The urethra.—M, Corpus cavernoſum penis of the right ſide.—N, Section of the left corpus cavernoſum penis.—O, Portion of the penis entire.—P, Q, Right and left corpora cavernoſa penis.—R, Corpus cavernoſum urethræ, ſurrounding the urethra.—S, Ligamentum ſuſpenſorium penis.—T, The ſcrotum.—U, The raphe, which extends from the anus to the extremity of the penis.—V, Section of the integuments.—W, The anus.—X, Sphincter ani.—Y, Levator ani.—Z, Os coccygis.—*a*, *a*, *a*, Os ſacrum.—*b*, *b*, Laſt lumbar vertebra.—*c*, Trunk of the common iliac artery.—*d*, Beginning of the external iliac artery.—*e*, Internal iliac artery.—*f*, *f*, Branches which go through the great notch of the os ilium to the muſcles.—*g*, External hæmorrhoidal branches.—*h*, Arteria pudenda communis.—*i*, Branch from this artery to the bulb of the urethra.—*k*, Umbilical artery.—*l*, Branches of this artery, to the veſica urinaria, veſiculæ ſeminales, and proſtate gland.

FIG. 14. From Parsons.

View of the Anterior Part of the Male Bladder of Urine, inflated; the Peritoneal Coat, and Cellular Subſtance being removed.

A, The urachus.—B, Muſcular coat of the bladder, called Detruſor Urinæ, running down upon the proſtate gland.—C, C, The ureters.—D, D, The under and lateral parts of the bladder, thinner and more dilated than the upper part.—E, E, The proſtate gland.

FIG. 15. From Parsons.

Poſterior View of the ſame Bladder of Urine.

A, B, C, D, As in Figure 14.—E, E, The veſiculæ ſeminales, and—F, F, The vaſa deferentia, turned down, to ſhew the poſterior part of the detruſor urinæ.—G, The tough ligamentous ſubſtance between the vaſa deferentia.

FIG. 16. From Parsons.

Anterior View of the Female Bladder of Urine, diveſted of Fat and Membranes, to ſhew its Situation upon the Vagina.

A, The orifice of the bladder, cloſe to,—B, B, The circular muſcular fibres, or ſphincter, from which part of the detruſor ariſes.—C, C, The circular fibres, or ſphincter of the vagina.—D, Inſide of the vagina, upon which the rugæ appear.

FIG. 17. From Cowper.

The Under Part of the Bladder, and beginning of the Urethra, ſlit open, and viewed Anteriorly.

A, The bladder.—B, A probe in the termination of the left ureter.—C, the ureter running obliquely between the coats of the bladder.—D, The termination of the right ureter, ſlit open.—F, F, The vaſa deferentia.—G, G, The veſiculæ ſeminales.—H, H, The neck of the bladder, ſurrounded by,—I, I, The proſtate gland.—K, A projection in the beginning of the urethra, forming the caput Gallinaginis.—L, The termination of the ſeminal ducts.—M, M, The termination of the ducts of the proſtate gland.—N, One of Cowper's glands.—O, The bulb of the urethra.—P, P, P, Probes put into ſome of the ducts of the urethra.

TAB. XXI.

FIG. 1.

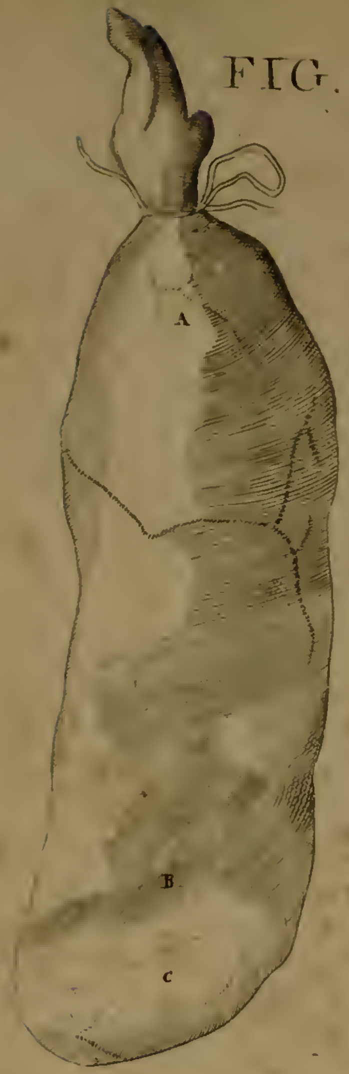


FIG. 2.

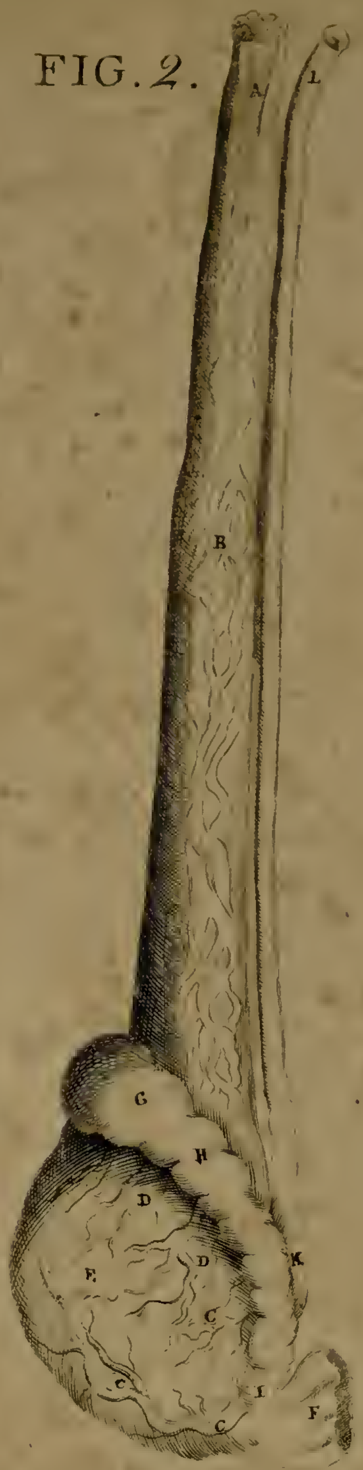


FIG. 3.

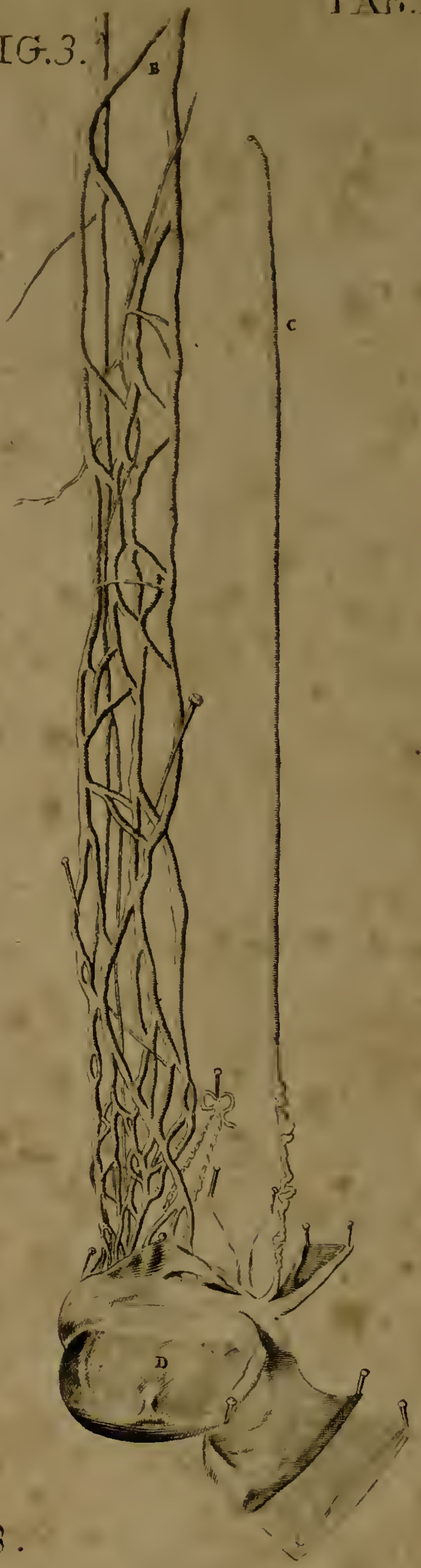


FIG. 4.

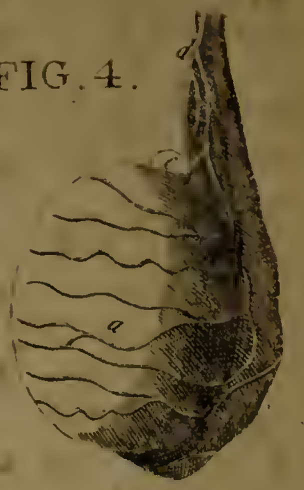


FIG. 5.

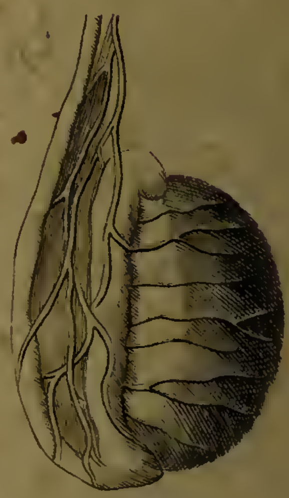


FIG. 6.

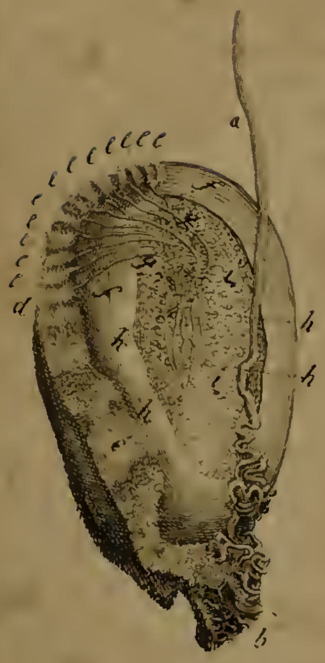


FIG. 7.

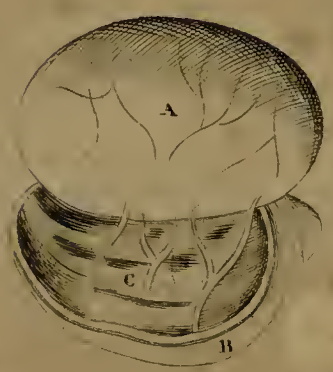


FIG. 8.

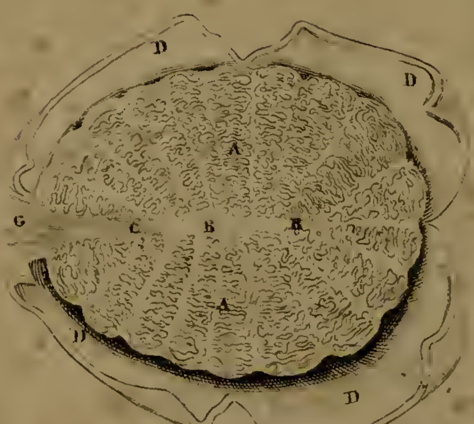


FIG. 9.

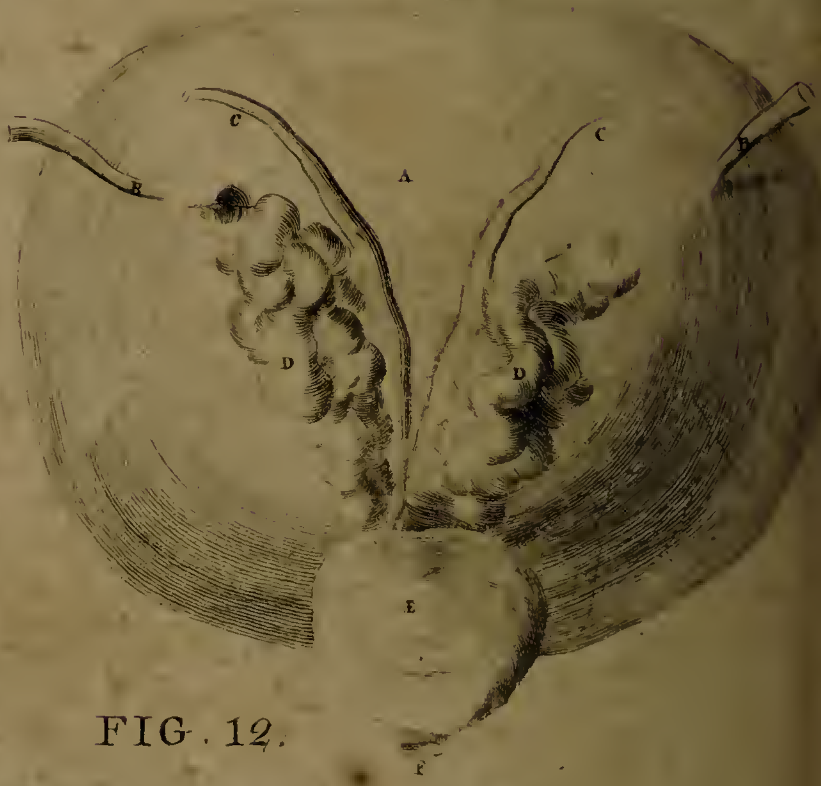


FIG. 10.

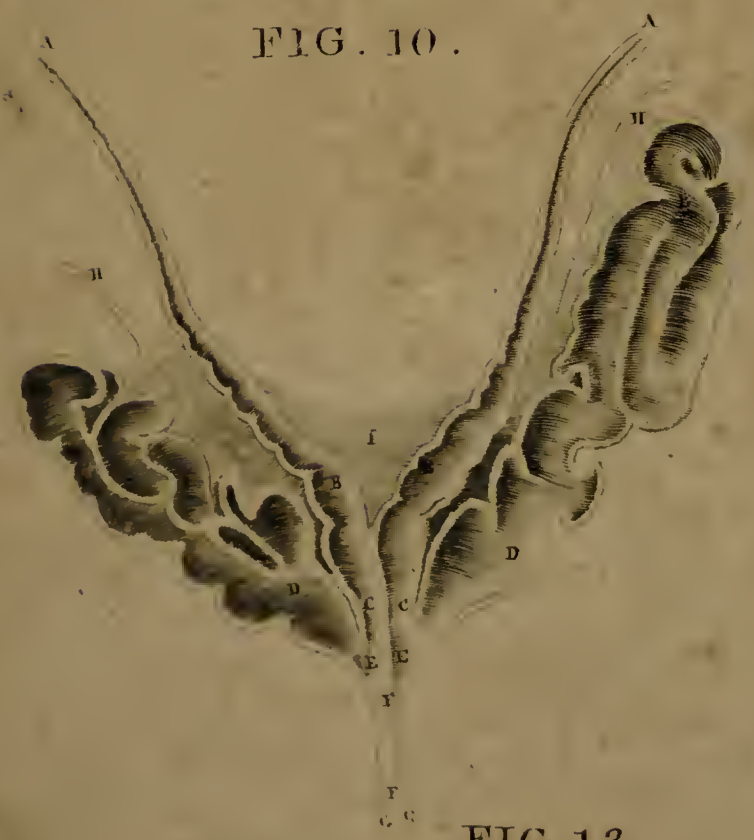


FIG. 11.

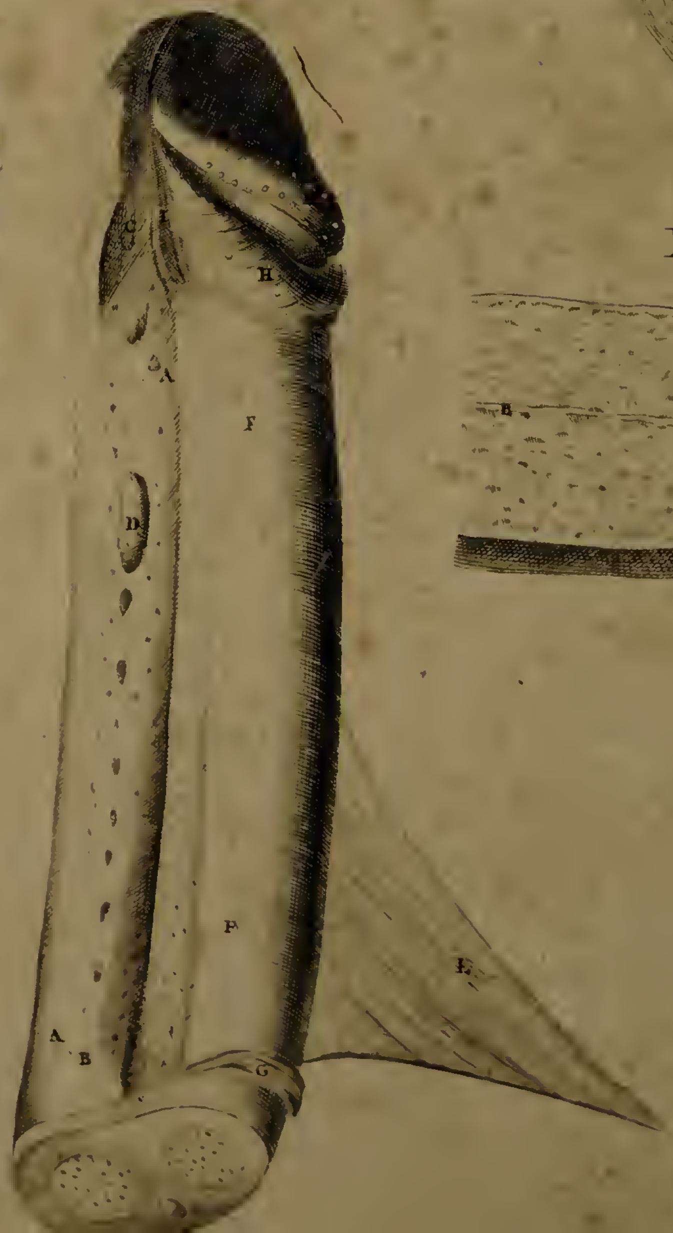


FIG. 12.

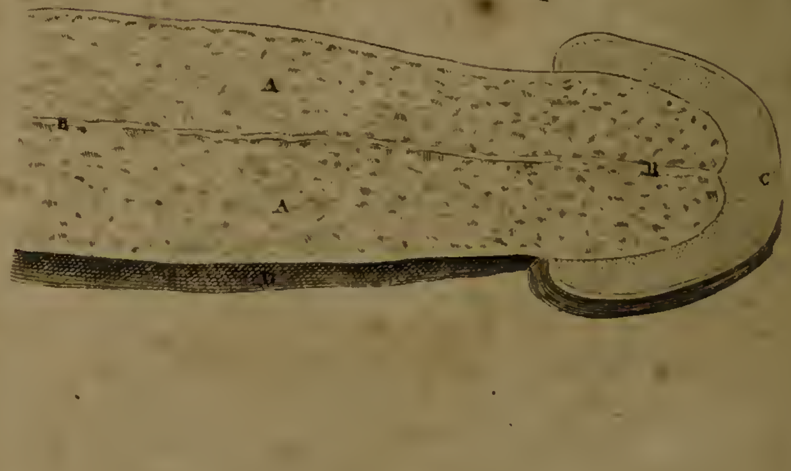


FIG. 13.

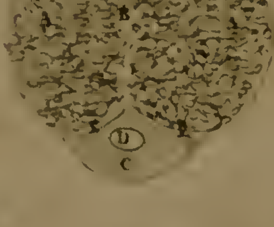


TABLE XXI.

Views of the Male Parts of Generation.

FIG. 1.

Gives a View of the Spermatic Proceſs of the Teſticle diſtended, to ſhew that there is no immediate communication between the Cellular Subſtance of this Proceſs and the Coats of the Teſticle.

A, B, The ſpermatic proceſs diſtended.—B, Partition formed by condenſed cellular ſubſtance between the ſpermatic proceſs and teſticle.—C, The teſticle incloſed in its coats.

FIG. 2. From De Graaf.

A View of the Spermatic Cord, and Testicle of the Left Side.

A, The vaſa preparantia.—B, Veſſels of the teſticle running in the ſpermatic cord, freed from their membranes.—C, C, The arteries of the teſticle.—D, D, The correſponding veins.—E, The tunica albuginea of the teſticle.—F, Part of the tunica vaginalis, turned back.—G, H, I, The epididymis;—G, Its globus major;—I, Its globus minor.—K, End of the epididymis, or beginning of the vas deferens.—L, Section of the vas deferens.

FIG. 3. From De Graaf.

Repreſents the Blood-Vessels and Seminal Ducts of the Testicle.

A, The ſpermatic artery.—B, The ſpermatic vein.—C, The vas deferens.—D, The teſticle, with its coats cut and pinned back.

FIG. 4. From Eustachius.

The Right Testicle, viewed from the fore-part.

a, The teſticle.—*b*, The vas deferens.—*c*, The epididymis.—*d*, *d*, *d*, Blood-veſſels.

FIG. 5. From Eustachius.

The ſame Teſticle, and ſame letters as repreſented in the former Figure, but viewed from behind.

FIG. 6. From Dr Monro's *Theſis*.

Shews the Spermatic Ducts of the Testicle, filled with Quick-ſilver.

a, The vas deferens;—*b*, Its beginning, which forms the poſterior part of the epididymis.—*c*, The middle of the epididymis, compoſed of ſerpentine ducts.—*d*, The head, or anterior part of the epididymis.—*e*, *e*, The coni vaſculoſi which compoſe the head of the epididymis, ſeparated a little from each other.—*f*, *f*, Vaſa efferentia.—*g*, *g*, Rete teſtis.—*h*, *h*, Vaſa recta.—*i*, *i*, The ſubſtance of the teſticle.

FIG. 7. From Eustachius.

Repreſents the Body of the Testicle, and Tunica Albuginea.

A, The naked pulpy-like ſubſtance of the teſticle. The lines running acroſs ſeem to indicate the ſeptula, which divide the ducts of the teſticle into bundles.—B, The outer, and,—C, The inner concave part of the tunica albuginea, which contains, and adheres to the pulp of the teſticle.

FIG. 8. From De Graaf.

The Testicle cut longitudinally, from before backwards, to ſhew its Internal Structure.

A, A, The ſeminal tubes collected into bundles between their membranous ſeptula.—B, B, The ſeminal tubes, running through the membranous ſubſtance.—C, C, A portion of the ſeminal tubes, cut acroſs, where they perforate the tunica albuginea.—D, D, D, D, The tunica albuginea, cut at the fore-part of the teſticle, and turned back.

FIG. 9. From Cheselden.

A View of the Under and Back Part of the Bladder, and of the Back Part of the Vesiculæ Seminales, and Prostate Gland.

A, The under and back part of the bladder.—B, B, The termination of the ureters in the bladder.—C, C, The vaſa deferentia.—D, D, The veſiculæ ſeminales.—E, The proſtate gland.—F, The urethra.

FIG. 10. From De Graaf.

Repreſents the Communication of the Vasa Deferentia, with the Vesiculæ Seminales, their Cavities being laid open.

A, A, Parts of the vaſa deferentia, with thick ſides and ſmall cavities.—B, B, The vaſa deferentia, with thin ſides and large cavities, where they approach the veſiculæ.—C, C, The vaſa deferentia, again contracted where they communicate with the veſiculæ.—D, D, The veſiculæ ſeminales expanded, to ſhew their contractions and dilatations.—E, E, The duct common to each vas deferens and veſicula ſeminalis of the ſame ſide.—F, F, The two common ſeminal ducts, adhering together without any communication between their cavities.—G, G, The part where the ſeminal ducts open into the urethra.—H, H, Veſſels running to the veſiculæ ſeminales.—I, Membrane which connects the veſiculæ ſeminales and vaſa deferentia to each other.

FIG. 11. From Morgagni.

A Section of the Anterior Part of the Penis, with the Urethra laid open.

A, A, Corpus ſpongioſum urethræ and urethra, cut longitudinally at their under ſide, and ſpread out.—Between B, and C, The orifices of the mucous follicles are ſeen, placed chiefly in the upper part of the urethra.—D, One of the mucous follicles, larger than the reſt, diſtended.—E, Ligamentum ſuſpenſorium, which fixes the penis to the oſſa pubis.—F, F, A membrane continued from the ligamentum ſuſpenſorium, ſurrounding the penis.—G, Part of the coat ſeparated from the body of the penis, and turned back.—H, Part of the prepuce, turned back.—I, The frænum.—K, Corona glandis, beſet with many ſebaceous glands, called Odoriferæ. A few of theſe are likewiſe ſeen upon the frænum and inſide of the prepuce.

FIG. 12. From Cheselden.

A Lateral and Longitudinal Section of the Fore Part of the Penis.

A, A, The corpora cavernoſa penis.—B, B, The ſeptum penis.—C, The corpus cavernoſum glandis.—D, Outer ſurface of one of the corpora cavernoſa.

FIG. 13. From Cheselden.

A Tranſverſe Section of the Penis.

A, A, Corpora cavernoſa penis.—B, Septum penis.—C, Corpus cavernoſum urethræ.—D, The urethra.—E, E, Partition between the corpora cavernoſa penis and corpus cavernoſum urethræ.

FIG. 1.

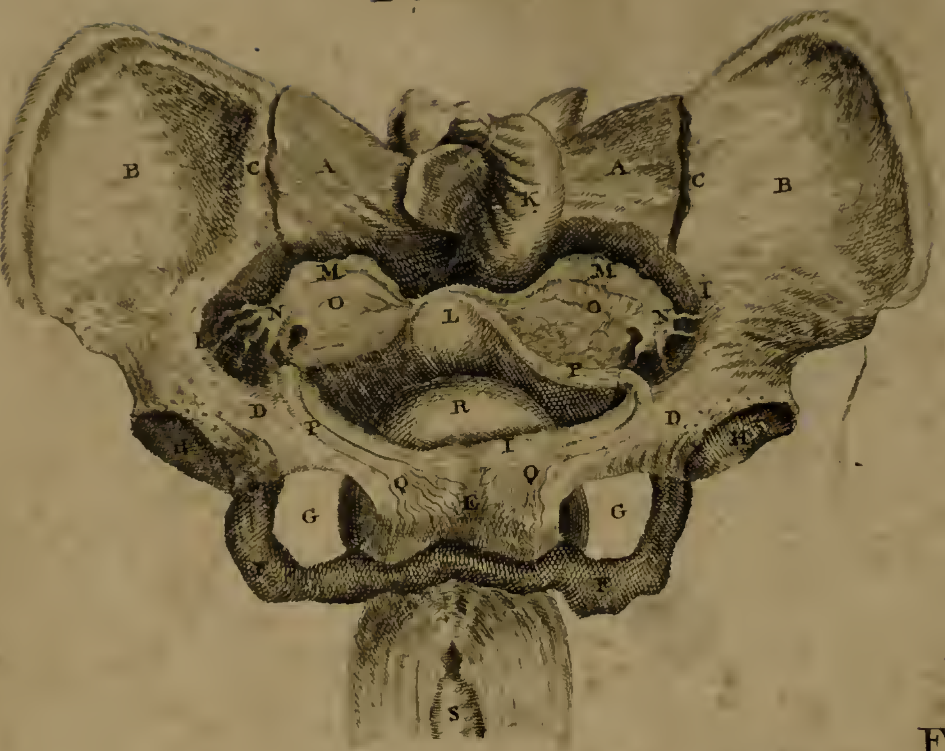


FIG. 2.

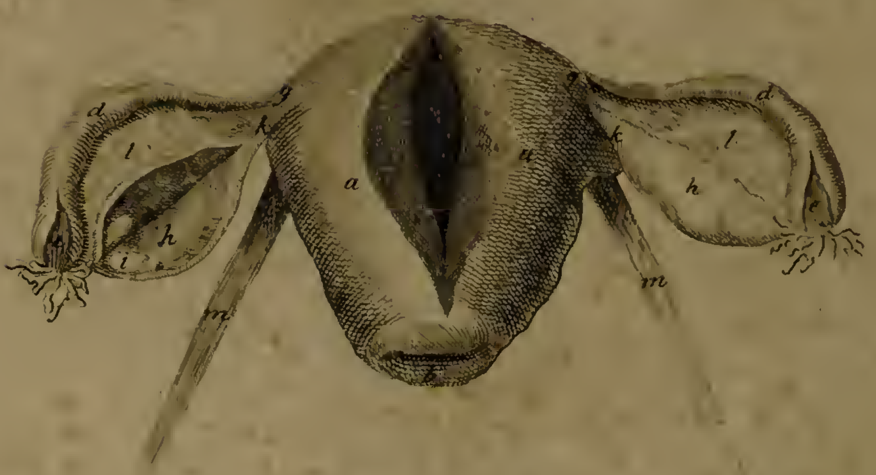


FIG. 3.

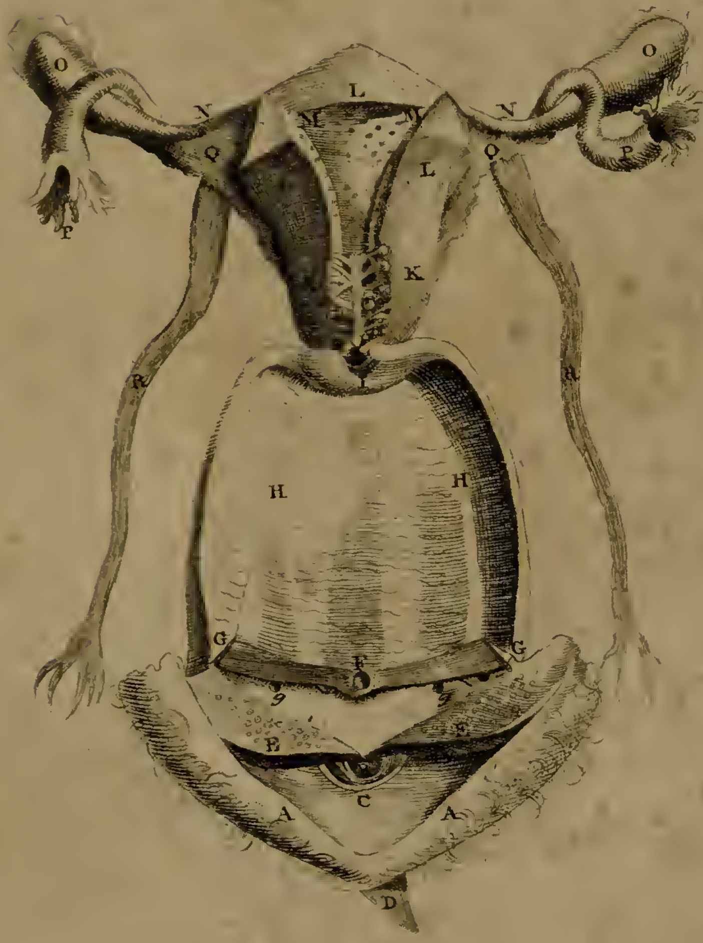


FIG. 5.

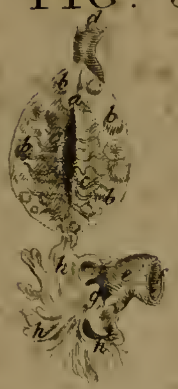


FIG. 6.

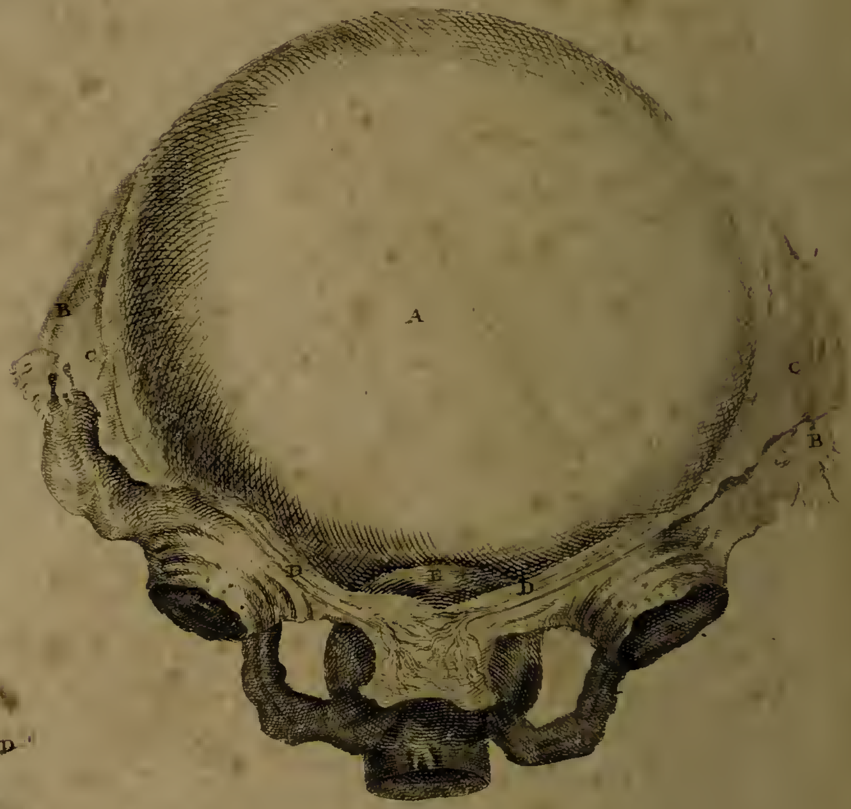


FIG. 4.

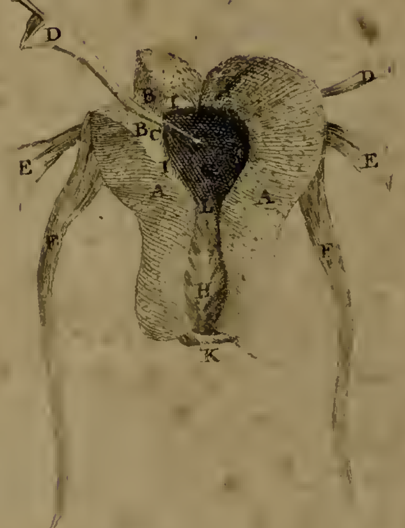


FIG 7.

FIG. 8.

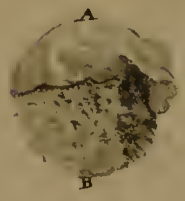


FIG. 9.

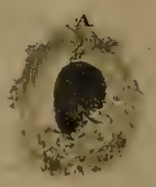


FIG. 10.

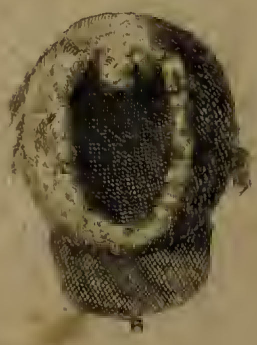


FIG. 11.

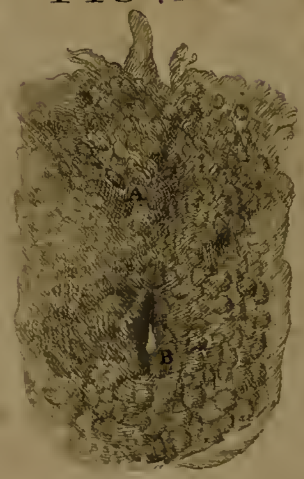


FIG. 12.

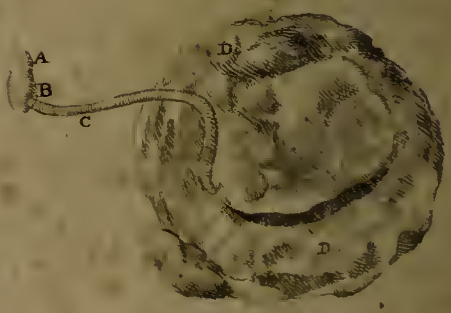


FIG. 13.

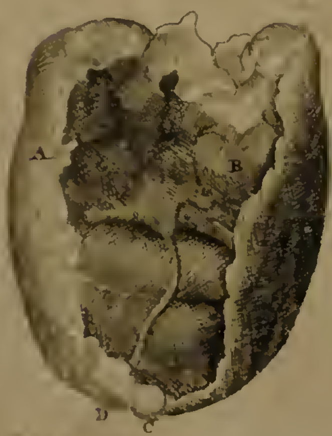


FIG. 14.

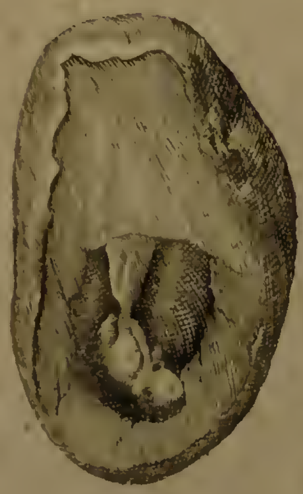


FIG. 15.

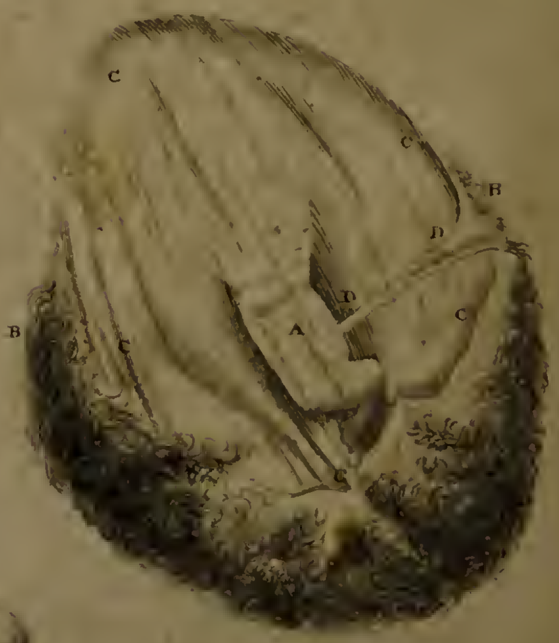


FIG. 16.

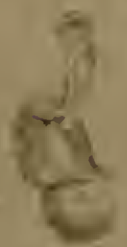


FIG. 17.

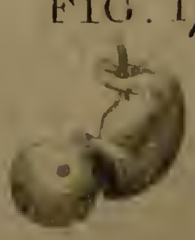


FIG. 18.

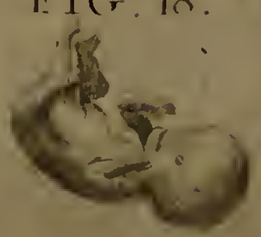


TABLE XXII.

Views of the Female Parts of Generation, and of the Fœtus in Embryo.

FIG. 1. From Parsons.

View of the Natural Situation of the Female Parts of Generation.

A, A, The upper part of the os ſacrum.—B, B, The cavities of the oſſa ilia.—C, C, The connection of the oſſa ilia with the os ſacrum.—D, D, The oſſa pubis.—E, The ſymphyſis of the oſſa pubis.—F, F, The tuberoſities of the oſſa iſchia.—G, G, The foramina thyroidea.—H, H, The acetabula for the articulation of the thigh-bones.—I, I, I, Brim of the pelvis.—K, The inteſtinum rectum.—L, The uterus.—M, M, The Fallopian tubes.—N, N, The fimbriæ of theſe tubes.—O, O, The ovaria, concealed by the ligamenta lata of the uterus.—P, P, The ligamenta rotunda uteri.—Q, Q, The inſertion of the round ligaments into the pubis.—R, The upper part of the bladder of urine.—S, The vagina.

FIG. 2. From Ruysch.

A View of the Uteru s,a few days Pregnant.

a, *a*, The body of the uterus cut open, by which its thickneſs and cavity appear.—*b*, The os tincæ.—*c*, The cavity of the uterus.—*d*, *d*, The uterine tubes.—*e*, *e*, The cavities of the tubes laid open.—*f*, *f*, The fimbriæ of the tubes.—*g*, *g*, The parts where the tubes open into the uterus.—*h*, *h*, The ovaria, one of which is cut open.—*i*, An ovum fæcundated.—*k*, *k*, The ligaments of the ovaria.—*l*, *l*, Portions of the ligamenta lata.—*m*, *m*, Portions of the ligamenta rotunda.

FIG. 3. From Morgagni.

View of the Female Parts of Generation, where the Uterus and Vagina are laid open behind.

A, A, The labia pudendi, ſtretched downward.—B, Glans clitoridis;—C, Its prepuce.—D, The ſuperior part of the ligamentum ſuſpenſorium of the clitoris.—E, E, The nymphæ, with their ſebaceous glands.—F, The urinary paſſage, near which are ſituated the orifices of the mucous follicles, or lacunæ, which belong to the glandular body with which the urethra is ſurrounded.—G, G, The hymen.—*g*, *g*, The extremities of the ducts of the lacunæ, placed before the hymen, which are called Proſtatæ Bartholini.—H, H, The vagina, in which are rugæ, not completely circular, but ceaſing in ſome places.—K, K, Neck of the uterus with its mucous follicles and rugæ.—L, L, L, Bottom of the uterus, in which are ſpots, ſuch as Morgagni obſerved in a virgin who was killed, during her menſtrual period, by a blow on the head.—M, M, Extremities of the Fallopian tubes, by which they open into the ſuperior angles of the uterus.—N, N, Ligaments of the ovaria, by which theſe parts of the tubes next the uterus are neceſſarily covered in this Figure.—O, O, The teſtes, or ovaria.—P, P, The tubes delineated in that poſition in which the author of this Figure moſt frequently found them.—Q, Q, Small portions of the ligamenta lata.—R, R, Ligamenta rotunda.

FIG. 4. From De Graaf.

The Uterus, diſtended in ſuch a manner as to ſhew the Paſſage of the Tubes into its Cavity.

A, A, Longitudinal ſection of the uterus.—B, B, The fundus of the uterus divided, to ſhew the entrance of the tubes into its cavity.—C, Origin of the tube.—D, D, The progreſs of the tubes gradually dilating.—E, E, Ligaments of the ovaria cut off.—F, F, Ligamenta uteri rotunda.—G, Cavity of the bottom of the uterus.—H, Cavity of the cervix, and its fibrous ſubſtance.—I, I, The proper membrane of the uterus.—K, Mouth of the uterus.—L, Contraction of the cervix uteri.

FIG. 5. From De Graaf.

Shews the Ovarium, with the annexed Extremity of the Tube.

a, The ovarium, opened longitudinally in the under part.—*b*, *b*, &c. Ova of different magnitudes, contained in the membranous ſubſtance of the ovarium.—*c*, *c*, Numerous blood-veſſels going to the ova.—*d*, Ligament of the ovarium.—*e*, Section of the Fallopian tube.—*f*, Cavity of the tube.—*g*, Orifice in the extremity of the tube.—*h*, *h*, The foliaceous part of the tube, which is attached to the ovaria.

FIG. 6. From Parsons.

View of the Uterus, ſome months Pregnant, to ſhew the Proportional Size with reſpect to the Pelvis, and the height to which it riſes above the Pubis.

A, The uterus.—B, B, The uterine tubes.—C, C, The ligamenta lata.—D, D. The ligamenta rotunda.—E, The bladder of urine.

FIG. 7. From Ruysch.

Ova of different ſizes.

FIG. 8. From Ruysch.

An Ovum Fœcundated, excluded from the uterus, entire.

A, The rudiment of the membranes.—B, The rudiment of the blood-veſſels forming the elements of the placenta.

FIG. 9. From Ruysch.

A Fœcundated Ovum, of nearly the ſame magnitude with that of Figure 8. opened: No ſolid ſubſtance was found in its Cavity.

A, The outer vaſcular part of the ovum;—B, Its cavity.

FIG. 10. From Ruysch.

Rudiment of a Placentula of the Minuteſt Human Embryo.

A, Crude element of the veſſels.—B, Coagulated blood adhering firmly to this crudity.

FIG. 11. From Ruysch.

Rudiment of the Placenta, to which the Embryo adheres by means of the Umbilical Cord.

A, Rudiment of the placenta.—B, Rudiment of the embryo, of the ſize of a lettuce-ſeed.

FIG. 12. From Ruysch.

Shews the Human Embryo, of the ſize of a Grain of Barley, adhering to the Placentula by means of the Umbilical Cord.

A, The head of the embryo.—B, The body not yet furniſhed with extremities.—C, The umbilical cord.—D, The placentula.

FIG. 13. From Ruysch.

Shews the Human Embryo, ſomewhat larger than the preceding, the Head of which is already diſtinct from the Body, and the beginnings of the Extremities are obſervable, in the form of very ſmall Tuberoſities.

A, The outer ſurface of the placentula.—B, Its inner ſurface.—C, The head of the embryo.—D, The body.

FIG. 14. From Ruysch.

Repreſents the Embryo of the ſize of an inch, the Head of which is not only diſtinguiſhable from the Body, but the Rudiments of the Extremities alſo appear like large Tubercles; and, which is particularly to be noticed, the Umbilical Cord is nearly equal in thickneſs to the Embryo itſelf, which the Author of the Figure reports he has ſeen oftner than once.—" Does this proceed," he aſks, " from " a morbid ſtate of the Cord?"

FIG. 15. From Heister.

Is an Abortive Fœtus of the third month, ſtill beautifully incloſed within its Membranes, as in an egg, and floating in its own Liquor;—all of their natural ſize.

A, The fœtus, with a large head and black eyes, as is generally the caſe in this ſtate, appearing tranſparent through the liquor and membranes.—B, B, B, B, The exterior layers of the chorion, full of veſſels depending like ſmall roots, which the author of this Figure thinks were firſt delineated by him.—C, C, C, C, The tranſparent coats of the fœtus, from which the vaſcular part has been ſeparated, to ſhew the fœtus ſurrounded by its fluid.—D, D, The umbilical cord.

FIG. 16. From Ruysch.

A Fœtus, with a remarkably thick Umbilical Cord.

FIG. 17. From Ruysch.

A Fœtus ſomewhat larger than the preceding. In this Fœtus, both the fingers and toes are viſible, and the Umbilical Cord is much thinner; ſo that this again is to be conſidered as a luſus naturæ.

FIG. 18. From Ruysch.

A Fœtus hanging by a hair; it is larger than the former, but the Umbilical Cord very little thicker.

FIG. 1.

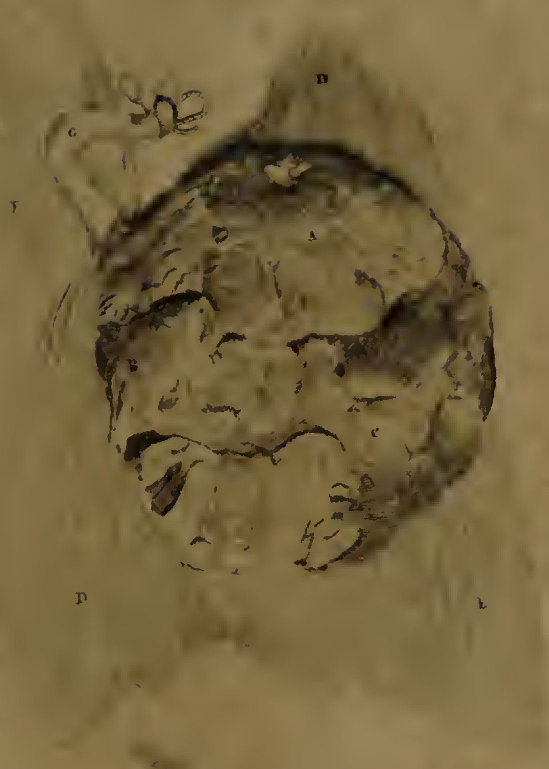


FIG. 2.

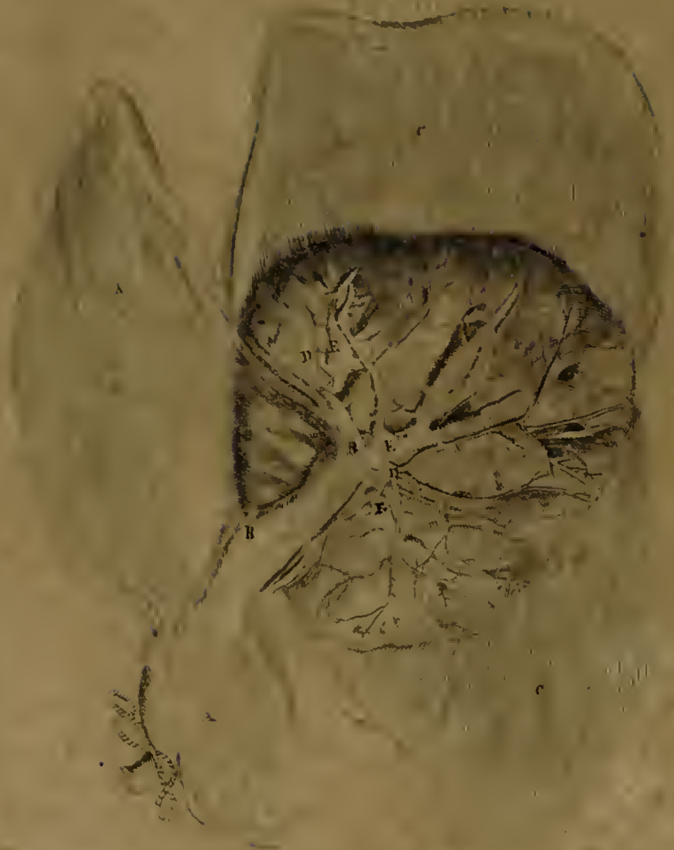


FIG. 3.

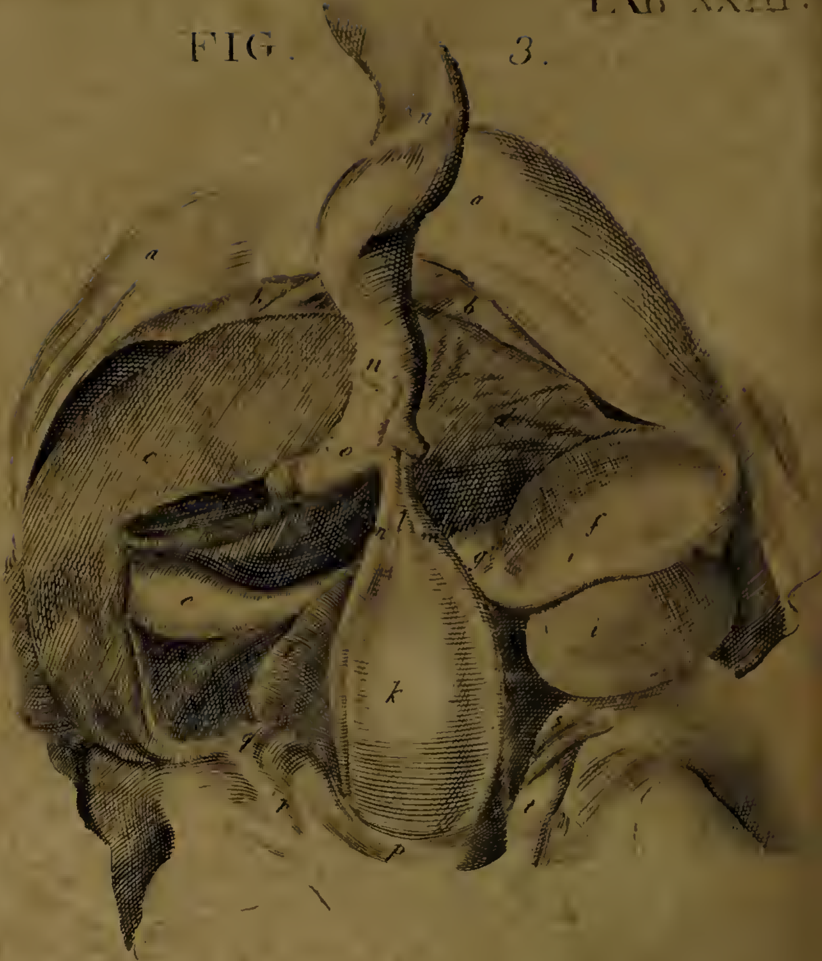


FIG. 4.

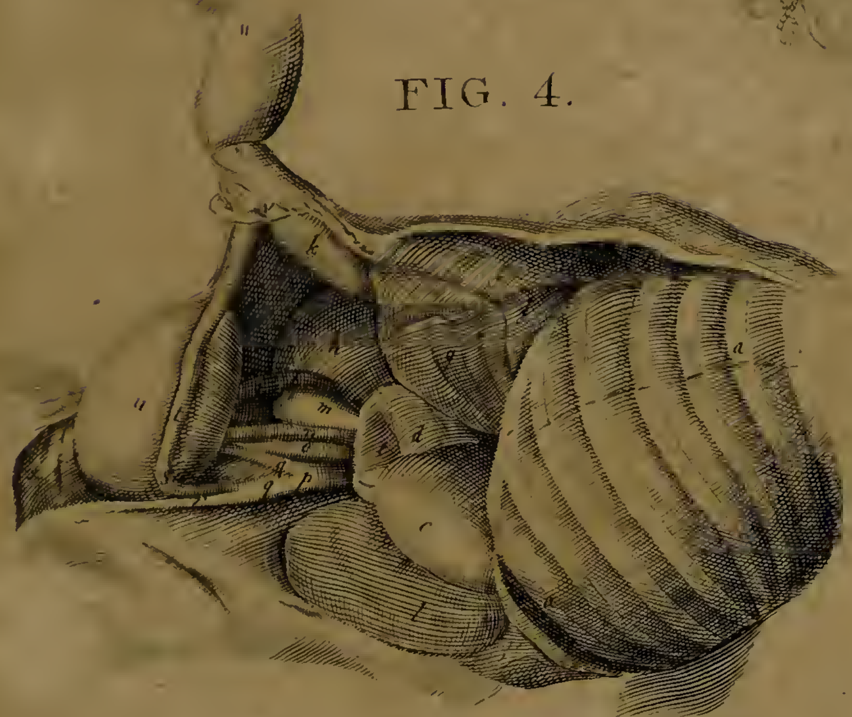


FIG. 5.

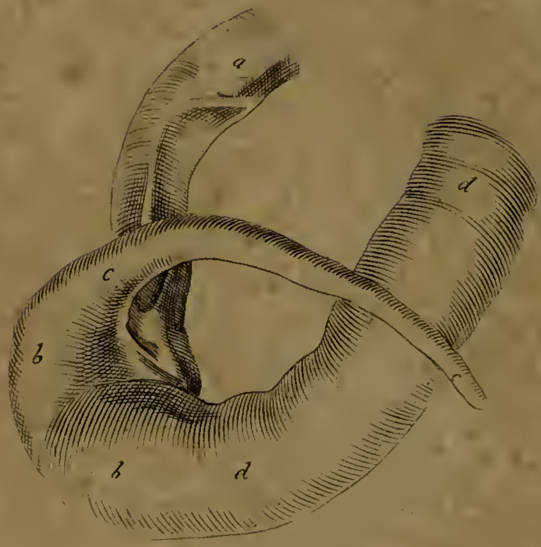


FIG. 6.

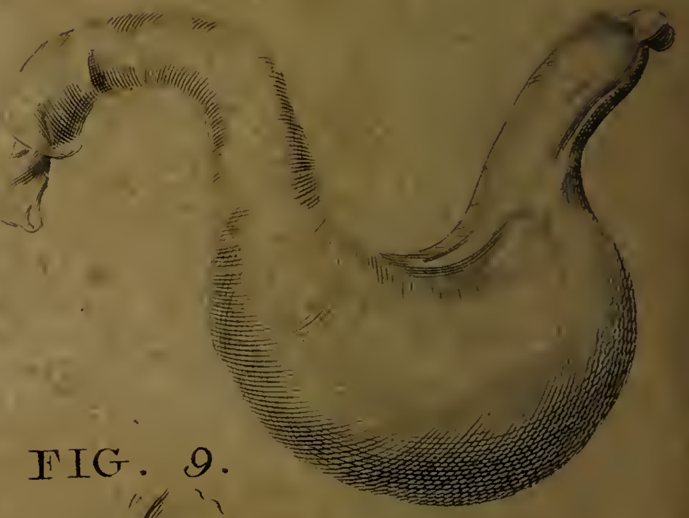


FIG. 7.

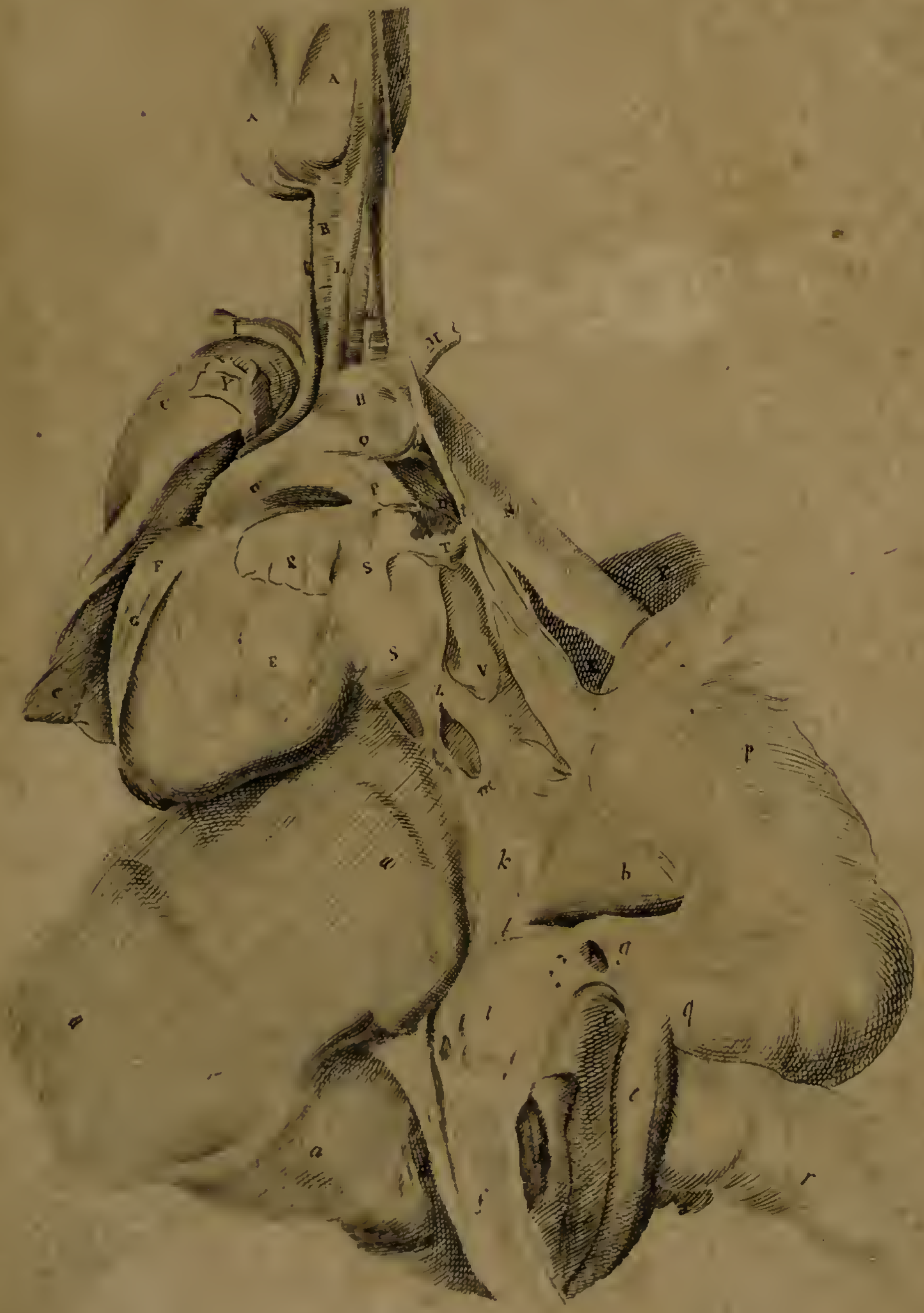


FIG. 8.

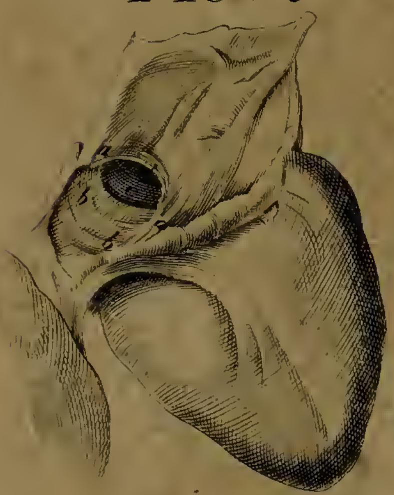


FIG. 9.

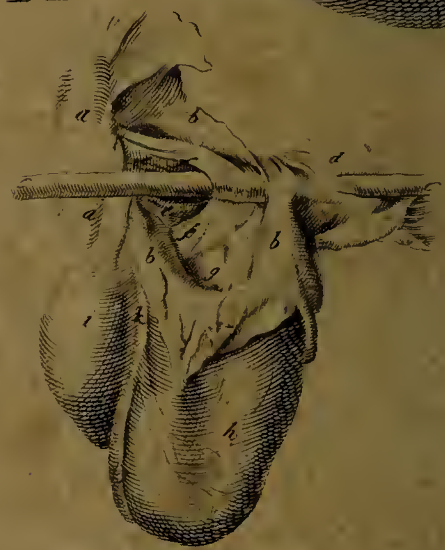


FIG. 10.

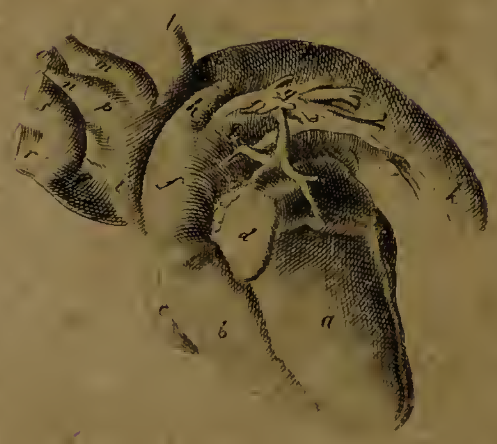


FIG. 11.

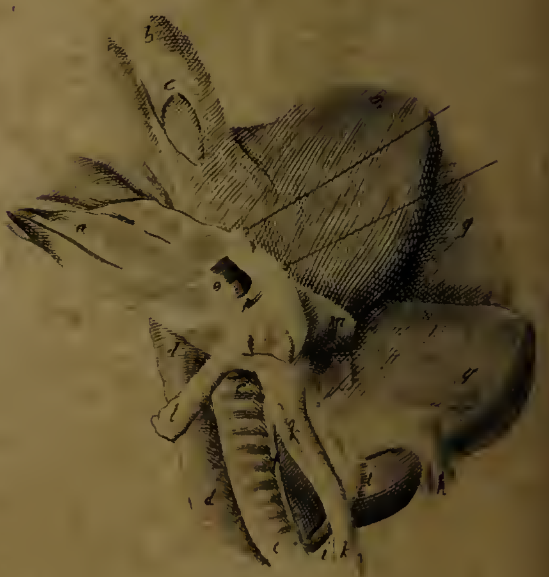


FIG. 12.

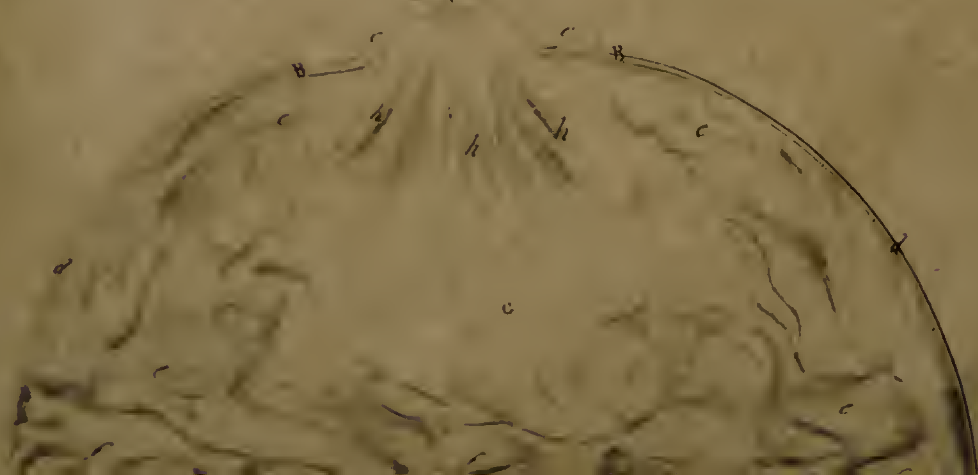


FIG. 13.

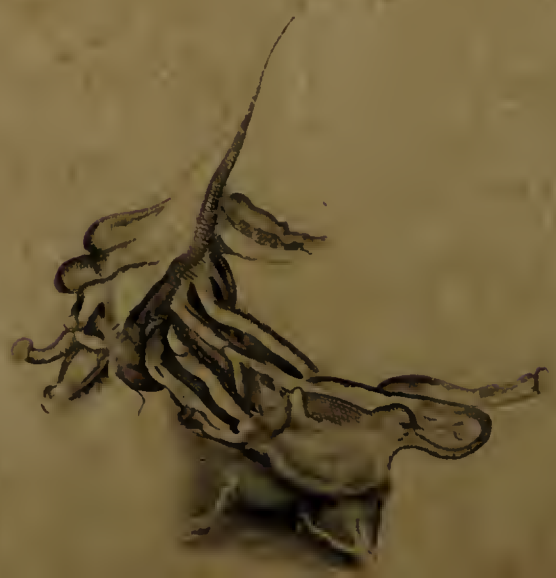


FIG. 14.

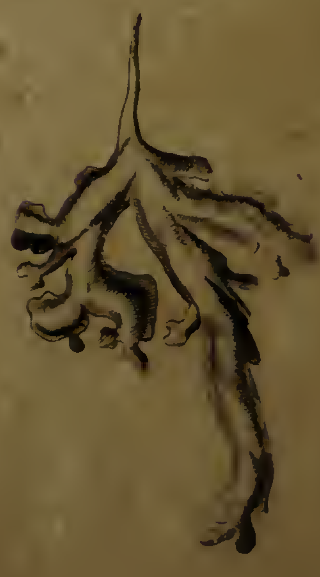


TABLE XXIII.

Figures I. and II. of this Table repreſent the Placenta. From Figure III. to Figure XI. the Peculiarities of the Fœtus are ſhewn. Figures XII. XIII. and XIV. give Views of the Ducts of the Mamma.

FIG. 1. From Bidloo.

View of the Placenta and Membranes.

A, B, C, The external convex ſurface of the placenta, with its fiſſures and tubercles, correſponding to the inequalities of that part of the uterus to which it adhered.—D, D, E, The chorion, or external membrane which involved the fœtus.—F, Part of the amnios, or internal membrane which involved the fœtus.—G, A portion of the umbilical cord tied.

FIG. 2. From Bidloo.

A View of that Side of the Placenta and Membranes next the Fœtus.

A, A, The amnios, ſeparated from the chorion.—B, B, A portion of the umbilical cord fixed to the inner ſide of the placenta, ſome way from its middle.—C, C, The chorion adhering firmly to the inner concave part of the placenta.——D, D, Branches of the umbilical arteries diſtended, and running upon the inner, or concave ſurface of the placenta.—E, E, The branches of the umbilical vein diſtended, alſo running upon the inner ſurface of the placenta.

FIG. 3. From Trew.

Front View of the Contents of the Abdomen, after removing the Inteſtines.

a, *a*, The thorax.—*b*, *b*, The diaphragm.—*c*, The large lobe of the liver;—*d*, Its ſmall lobe.—*e*, The gall-bladder.—*f*, The ſtomach.—*g*, The pylorus.—*h*, A Section of the duodenum.—*i*, *i*, The kidneys.—*k*, The bladder of urine aſcending almoſt to the umbilicus.—*l*, The production of the fundus veſicæ, called Urachus.—*m*, *m*, Umbilical arteries running along—*n*, *n*, The umbilical cord.—*o*, The umbilical vein paſſing from the cord to the liver.—*p*, Symphyſis of the os pubis.—*q*, *r*, *s*, *t*, The teſticles, in their deſcent from the abdomen to the ſcrotum, incloſed in their vaginal coats.

FIG. 4. From Trew.

View of the Contents of the Abdomen from the Left Side, after removing the Inteſtines.

a, *a*, The ribs.—*b*, The cartilago enſiformis.—*c*, The ſtomach.—*d*, The pylorus.—*e*, A ſection of the duodenum.—*f*, *f*, The convex ſurface of the ſmall lobe of the liver, drawn a little up, to ſhew—*g*, The concave ſurface.—*h*, Concave ſurface of the large lobe.—*i*, A portion of the gall-bladder.—*k*, The umbilical vein entering the liver.—*l*, The left, and—*m*, Part of the right kidney.—*n*, The right ureter.—*o*, The vena cava inferior.—*p*, Under end of the aorta.—*q*, *q*, The common iliac arteries.—*r*, The external iliac artery.—*s*, The internal iliac artery, the continuation of which forms—*t*, The umbilical artery, aſcending by the ſide of—*u*, The bladder of urine.—*v*, The umbilicus.—*w*, Part of the umbilical cord.—*x*, Symphyſis of the oſſa pubis.

FIG. 5. From Trew.

The End of the Small, and Beginning of the Great Inteſtines, viewed from the Left Side.

a, *a*, Portion of the inteſtinum ilium.—*b*, *b*, Inteſtinum cæcum;—*c*, *c*, Its vermiform proceſs.—*d*, *d*, Beginning of the inteſtinum colon.

FIG. 6. From Trew.

Shews the Form and Size of the Stomach of a New-born Child, moderately diſtended.

FIG. 7. From Trew.

Shews the following Parts from a Fœtus born at the full time, and which died immediately after Birth.

A, A, The two lobes of the thyroid gland.—B, The trachea.—C, C, The right lobe of the lungs.—D, Bronchia of the left lobe cut off.—E, Left ventricle of the heart.—F, Part of the right ventricle.—G, A diviſion between the two ventricles, very diſtinct in the fœtus.—H, Arch of the aorta.—I, Right ſubclavian artery.—K, Right carotid.—L, Left carotid.—M, Left ſubclavian.—N, Aorta deſcendens.—O, Trunk of the pulmonary artery;—P, Its left pulmonary branch.—Q, Ductus arterioſus.—R, Left auricle.—S, S, Left ſinus venoſus.—T, Branches of the left pulmonary vein.—V, A ſmall portion of the right lobe of the lung.—X, X, X, Portion of the diaphragm.—Y, Trunk of the ſuperior vena cava.—Z, Trunk of the inferior vena cava.—*a*, *a*, *a*, Inferior ſurface of the ſmall lobe of the liver.—*b*, Lobulus Spigelii.—*c*, *c*, Eminence called Porta.—*d*, *d*, Part of the liver, which ſurrounded the umbilical vein, diſſected.—*e*, The gall-bladder.—*f*, The umbilical vein laid open.—*g*, The vena portæ, alſo laid open.—*h*, Orifice of the right branch of the vena portæ, going to the large lobe of the liver.—*i*, The left branch, which goes to the ſmall lobe, ſlit open.—*k*, The ductus venoſus, opened longitudinally, in which *l*, and *m*, point out its obliquities, which the author of this Figure conſidered as the veſtiges of valves.—*n*, Part of the pharynx.—*o*, The œſophagus.—*p*, The bottom of the ſtomach.—*q*, The pylorus.—*r*, Part of the colon.—*s*, Part of the ſmall inteſtines.—*t*, *t*, The left part of the eighth pair of nerves.—*u*, *u*, The recurrent branch of the eighth pair of nerves aſcending to the larynx.

FIG. 8. From Trew.

The Heart, with the Right Auricle opened and drawn aſide, ſo that the Foramen Ovale is brought into view.

a, *a*, The anterior part of the ſeptum of the auricles.—*b*, *b*, The poſterior part of the ſeptum.—*c*, The valve of—*d*, The foramen ovale.

FIG. 9. From Trew.

The Heart, with the left Auricle opened.

a, *a*, The pulmonary artery.—*b*, *b*, *b*, Cut edge of the auricle opened.—*c*, *c*, A probe paſſed from the left auricle through the foramen ovale, into—*d*, *d*, The inferior vena cava.—*e*, *e*, Anterior part of the ſeptum, the margin of which terminates in the right auricle.—*f*, *f*, The valve of the foramen ovale, which extends from the poſterior part of the ſeptum to the left auricle, where it is ſeen raiſed above the probe.—*g*, Orifice of the left ventricle.—*h*, The left ventricle.—*i*, The right ventricle.—*k*, *k*, The diviſion between the ventricles.

FIG. 10. From Trew.

Shews the Heart of the Fœtus reſting upon the Right Ventricle, to bring into view the Connection of the Ductus Arterioſus, with the Pulmonary Artery and Aorta, on the Anterior Surface.

a, The left ventricle;—*b*, The right.—*c*, Apex of the right auricle.—*d*, The left auricle.—*e*, *e*, Branches of the left pulmonary vein.—*f*, The pulmonary artery.—*g*, *g*, Left branch of the ſame, with its diviſions.—*h*, Ductus arterioſus.—*i*, *i*, Arch of the aorta.—*k*, *k*, Aorta deſcendens.—*l*, Left ſubclavian artery.—*m*, Left carotid.—*n*, Right carotid, and

TABLE XXIII. CONTINUED.

and—*o*, Right ſubclavian ;—*p*, Their common origin.—*q*, Trunk of the vena cava ſuperior.—*r*, The right, and—*s*, The left jugular vein.

FIG. 11. From Trew.

Shews the Heart, with ſome of the adjacent Parts, from the ſame Subject, in an inverted ſituation.

a, Apex of the heart.—*b*, Vena cava inferior, or deſcendens.—*c*, Valvular production at the mouth of the venous canal.—*d, d*, The œſophagus.—*e, e*, The trachea.—*f*, The recurrent nerve.—*g, g*, The lungs.—*h*, The right ſubclavian artery.—*i, i*, The right carotid.—*k, k*, The left carotid.—*l*, The left ſubclavian artery.—*m*, Arch of the aorta.—*n*, The aorta deſcendens opened and expanded.—*o*, The mouth of the ductus arterioſus opening into the aorta.—*p*, Obliquity of this opening, acting as a valve upon the termination of this duct.

FIG. 12. From Morgagni.

Repreſents a Perpendicular Section of the Mamma, through the Centre of the Papilla.

A, The papilla.—B, B, Boundaries of the areola.—*c, c*, Section of three of the ſebaceous glands, where likewiſe a few lactiferous ducts ſometimes terminate.—*d, d*, Integuments of the mamma.—*e, e, e, e*, Superior, or exterior ſtratum of fat.—*f, f, f*, Inferior, or interior ſtratum of fat.—G, Glandular part of the mamma, ſituated between the two ſtrata of fat ; of an irregular figure, compacted into one large body, in the inner parts of which we ſee no remarkable intervals filled with fat.—*h, h, h*, Large lactiferous ducts, as they appeared in this ſection, going from the glandular part to the papillæ.

FIG. 13. and 14. Ephemerid. Germ. Act.

Give Views of the Trunks and Branches of two Lactiferous Ducts, dilated.